

ANNUAL REPORT OF THE
COMMISSIONERS OF THE
DISTRICT OF COLUMBIA
YEAR ENDED JUNE 30, 1908

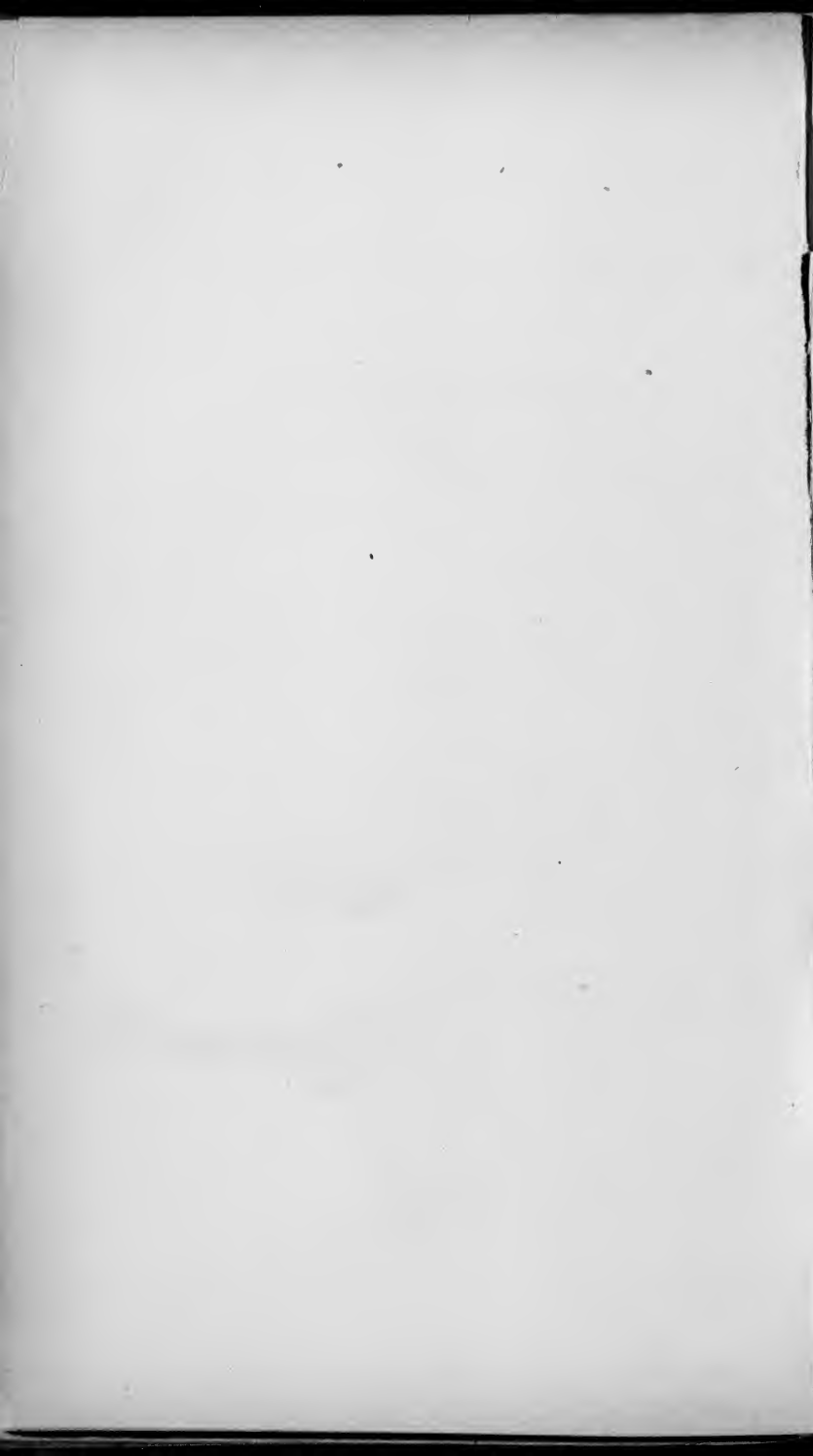
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ENGINEER DEPARTMENT
REPORTS



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EXTRACT FROM THE REPORT OF THE COMMISSIONERS OF THE
DISTRICT OF COLUMBIA FOR THE YEAR ENDED JUNE 30, 1908.

OFFICE OF THE COMMISSIONERS
OF THE DISTRICT OF COLUMBIA,
Washington, November 12, 1908.

The Commissioners of the District of Columbia herewith submit, for the information of Congress, as required by law, their annual report of the official doings of the government of said District for the fiscal year which ended June 30, 1908.

* * * * *

ELIMINATION OF GRADE CROSSINGS AND CONSTRUCTION OF UNION
STATION.

The work of eliminating grade crossings in the District of Columbia, under the provisions of acts of Congress approved February 12, 1901, and February 28, 1903, was completed during the year, with the exception of some minor detail work. The Union Station, the construction of which was also provided for under the act of Congress approved February 28, 1903, has also been completed and was occupied by the railroad companies on November 17, 1907.

The legislation providing for this work directed the Commissioners of the District of Columbia to certify to its proper completion, upon which certification the Philadelphia, Baltimore and Washington Railroad Company was to be paid the sum of \$1,500,000 from funds of the United States and the Baltimore and Ohio Railroad Company the sum of \$1,500,000, one-half of which was to be paid from funds of the United States, and the other half from revenues of the District of Columbia. The first application for such a certificate was received from the Philadelphia, Baltimore and Washington Railroad Company, and there was some question in the minds of the commissioners whether the work had been completed to such an extent as to fulfill the requirements of the law. They therefore withheld their certificate in this case until the matter was judicially determined. The railroad company applied for a writ of mandamus compelling the issuance of the certificate, and this writ was issued by the supreme court of the District of Columbia, whereupon the commissioners, as directed by an order issued by the court, made such a certificate and filed it with the Secretary of the Treasury, as required by the law.

Subsequently an application was made by the Baltimore and Ohio Railroad Company for a certificate entitling them to the payment of \$1,500,000, which was obtained upon the completion of the work to be done by that company and the delivery to the District of Columbia of a deed of the right of way of the old main line of that company between Second street east and Ivy City. This deed was furnished and the work ordered by the legislation was properly completed in the opinion of the commissioners, with the exception of

certain work of lining the H street subway under the railroad. The commissioners thereupon issued a certificate to the Baltimore and Ohio Railroad Company entitling it to the payment of the sum of \$1,500,000 upon the condition that the railroad company would deposit with the District of Columbia the sum of \$30,000 to guarantee the lining of this subway if the commissioners should subsequently determine that such work was necessary. This deposit was made by the railroad company.

The location of the Union Station required a fill of about 40 feet at Massachusetts avenue to form a plaza in front of the station. This fill was substantially completed and a temporary surface of macadam was placed on the plaza and the streets leading to same. The District appropriation act for the fiscal years 1908 and 1909 provided for the embellishment of this plaza by the construction of fountains, lamp-posts, and other structures at a total cost to the United States and the District of Columbia of \$100,000, provided that the Washington Terminal Company, which constructed the station for the Philadelphia, Baltimore and Washington Railroad Company and the Baltimore and Ohio Railroad Company would defray so much of the cost of similar work as was called for by the plans to be done within the limits of its property. Plans have been prepared for this work by D. H. Burnham & Co., architects, of Chicago, and contracts will be let for the work during the fiscal year 1909.

By an act of Congress approved May 23, 1908, certain extensions were authorized to be made in the lines of the Capital Traction Company and the Washington Railway and Electric Company, operating street car lines in the District of Columbia, in order to furnish street car transportation to and from the Union Station. The act provided for a temporary trolley line to the station, which was constructed and operated within the time required by the act, and also provided for the permanent construction, to be completed on or before May 1, 1909. The work of installing this permanent construction is now in progress.

The paving of the plaza and the intersecting streets must await the settlement of the fill, but, with a few exceptions, steps are now being taken to do this paving, as the commissioners believe that the fill has settled sufficiently to permit of this permanent work being done.

The act providing for the elimination of grade crossings confined the operations to the city limits. A number of grade crossings exist outside the city limits, but within the territorial limits of the District of Columbia, and the commissioners suggest that in order to properly safeguard the public using these crossings they also should be eliminated by a provision for the crossing at different grades. One such dangerous crossing has just been eliminated in Brookland, and one other point suggested for early consideration in this connection is at Takoma Park.

GRADE DAMAGES.

The work of the grade damage claims commission in ascertaining the damages to private property caused by changes in the grade of streets and alleys due to the location of the Union Station and the elimination of grade crossings is still in progress. There were 103

claims for damages heard, involving 207 pieces of realty. In 66 of these cases damages were awarded aggregating \$84,025, while in 37 cases the commission awarded no damages, as they considered that whatever damages had been suffered were offset by benefits due to the location of the station and the elimination of grade crossings. Forty-nine cases were appealed from the awards of the commission either by the Commissioners of the District of Columbia or the property owners, and juries asked for. A number of cases were compromised, and in this way the District saved \$6,635, this sum representing the aggregate difference between the awards of the commission and the amounts for which the claims were compromised. The number of claims filed before the commission was 739.

Up to the present time the claims considered have been confined to the changes in grade along the line of the Baltimore and Ohio Railroad, in the northeast section of the city. The law provides that the commission shall also consider claims of damages along the line of the Philadelphia, Baltimore and Washington Railroad in southeast and southwest sections of the city.

ROADWAY PAVEMENTS.

The total amount of funds appropriated by Congress and deposited by public service corporations and others in connection with the paving of roadways, sidewalks, and alleys aggregated about \$1,285,000. Of this amount \$485,000 was appropriated for paving the roadways of new streets and for repairing and replacing existing roadways on streets already paved within the city limits. About \$218,000 was appropriated for the construction and repair of streets and roads outside of the city limits.

In paving roadways the materials used were sheet asphalt and asphalt block. The work of paving roadways with sheet asphalt was divided between two contractors and the contract prices were \$1.68 and \$1.69 per square yard. The work of paving with asphalt block was awarded at the price of \$1.80 per square yard on edge and at \$1.65 per square yard paved flat. For the fiscal year 1909 but one contract was awarded for sheet asphalt paving at the following prices:

| | Per square yard. |
|---|------------------|
| For laying asphalt pavement..... | \$1.48 |
| For laying vitrified block gutters..... | 1.17 |

The contract price for laying asphalt block paving for the same period is as follows:

| | Per square yard. |
|---|------------------|
| Laying asphalt block pavement in old city limits..... | \$1.65 |
| Laying asphalt block pavement outside of old city limits..... | 1.80 |

The commissioners again call attention to the question of replacing granite block pavement with sheet asphalt. A number of these granite block pavements exist in the residential portions of the city which should be replaced, and were it not for a provision contained in the District appropriation acts that the commissioners shall not estimate for replacing such pavements with smooth pavements these streets would be included in the schedule of streets submitted by the commissioners with their estimates to Congress. In order to bring the matter to the attention of Congress, however, the commissioners have submitted in one or two cases a special item providing

certain work of lining the H street subway under the railroad. The commissioners thereupon issued a certificate to the Baltimore and Ohio Railroad Company entitling it to the payment of the sum of \$1,500,000 upon the condition that the railroad company would deposit with the District of Columbia the sum of \$30,000 to guarantee the lining of this subway if the commissioners should subsequently determine that such work was necessary. This deposit was made by the railroad company.

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for such work. The commissioners are in favor of smooth pavements, especially in the residential sections, and such pavements should also be constructed in the business sections where the traffic is not heavy. So long as such replacement is undertaken gradually there is in addition an economic advantage, as the materials removed can always be replaced on a street having heavy traffic, where its character is more suitable, the two paving jobs costing but a trifle more than would the one job if constructed of new granite block.

The work of resurfacing old, worn-out asphalt and coal-tar pavements with new pavements is progressing under appropriations made for the purpose. In order to properly take care of this branch of the work an annual appropriation of \$400,000 should be made for a number of years. This large sum is necessary as these pavements, which were laid about eighteen years ago, are failing. From eighteen to twenty years ago a very great quantity of asphalt roadway was laid, and as the average life of an asphalt pavement is hardly twenty years these pavements are demanding renewal faster than the funds appropriated therefor will permit, unless there is a substantial increase in this fund.

SIDEWALKS AND ALLEYS.

About \$200,000 was expended for paving sidewalks and alleys. Practically all sidewalks laid are constructed of cement and alleys are paved with vitrified or asphalt blocks. The prices paid during the year for laying cement sidewalks, which work was done under contract, were \$1.05 in city limits and \$1.18 outside of city limits, and for the next fiscal year the prices are 95 cents and \$1.18, respectively. The alleys are paved by day labor.

The demand for laying cement sidewalks and paving alleys is very constant, as the District of Columbia is growing rapidly. As private property is developed requests are made for paving sidewalks and alleys which are necessary in order to place the property on the market. The cost of doing this work is divided between the property owner and the District of Columbia, each paying one-half cost.

BRIDGES.

The Connecticut Avenue Bridge was completed and opened to travel during the year. The total appropriation for this bridge was \$850,000, which was practically all expended in its construction. In order to prevent the encroachment of private building too close to the bridge structure the commissioners recommend that a small piece of land immediately adjacent to the south approach be purchased and converted into a public park. A bill for this purpose was introduced at the last session of Congress, but failed of passage. It is the intention of the commissioners to recommend its passage at the next session. Unless this land is obtained the entire æsthetic value of this bridge will be lost.

The Monroe Street Bridge across the tracks of the Baltimore and Ohio Railroad Company at Brookland, D. C., was completed at a cost of \$44,000.

The new Anacostia Bridge has been completed and will be opened for travel as soon as the approaches are finished, which is believed will be about January 1, 1909.

When this bridge is completed it will be necessary to remove the old bridge, which is estimated will cost \$10,000.

A bridge has been constructed over the railroad tracks on the line of New York avenue, but owing to the fact that New York avenue does not extend to the east of the bridge it will be necessary to condemn land for the extension before the bridge can be used. A bill for this purpose was introduced at the last session of Congress, but failed to become a law.

A new bridge has been constructed over the railroad tracks on the line of T street, and when the east approach has been completed by the railroad company it will be opened for traffic and will afford a northwestern outlet to a large section of territory lying in the north-east section of the city.

The commissioners will submit an estimate to Congress for an appropriation to widen the bridge over Piney Branch on the line of Sixteenth street, as contemplated in the original plans.

SURVEYOR'S OFFICE.

The work of the office of the surveyor shows a decrease from that of the previous year. This decrease was due to business depression, which reduced the building operations and consequently the number of orders received by this office for surveys in connection with such operations. The number of new subdivisions laid out was also less than the number laid out last year. The fees received by this office from work done for private parties amounted to \$13,040.80, which was a decrease over the fees of last year of about \$2,000. Indications during the present fiscal year point to a decided upward movement in building operations, which will result in increased work for this office.

This office is much handicapped in making surveys in the outlying portions of the District by insufficient transportation. In order to meet this condition the commissioners have recommended the purchase of a motor vehicle to carry field parties quickly to the place of their work. If this is granted much economy will result.

STREET NAMES.

The new system of street nomenclature for all that part of the District of Columbia lying outside of the city of Washington has been completed and recorded.

STREET AND ALLEY EXTENSIONS.

Only one bill for the extension of streets was enacted during the year. This provided for the widening of Benning road, from Fifteenth street to Oklahoma avenue, upon the dedication of not less than 50 per cent of the land necessary. As this dedication has not been made, no action toward the widening of the road has been done.

Under the direction of this office a new map of the District of Columbia was completed, showing all public highways and the extensions proposed under the plans for the permanent system of highways. The map showed the new street names and also the new numbering of all squares in the District of Columbia outside of the city limits.

Eleven cases of alley condemnations were filed in court.

TREES AND PARKINGS.

The number of trees set out during the year was 3,329, an increase of 755 over the number planted during the previous year. The number of trees removed was 2,042. The number of trees on the streets and parkings and in school yards at the close of the year was 94,035. The mileage of streets planted with trees is 522.5. The amount expended in the care of trees and parkings was \$34,695.94.

The estimate of the commissioners for planting trees for the next fiscal year is \$45,000. In addition the commissioners will ask for \$30,000 for the purchase of ground for a tree nursery. At the present time such a nursery is established on ground belonging to other branches of the District government, which is permitted to be used for the purpose, but its use can be withdrawn at any time when it is desired for the purpose for which its use was intended. The commissioners believe that a permanent nursery should be provided at an early date, as seedlings can not be placed on the streets until they are about 5 years old.

It is the intention during the next fiscal year to use a portion of the appropriation for the care of trees and parkings in improving the conditions of the continuous tree spaces along the curb lines in which the trees are planted. It has been impossible to do this heretofore, owing to the small amount of appropriation granted, but such work is believed to be extremely desirable in order to improve the appearance of the streets.

SEWERS.

The total length of sewers constructed during the year was 19.74 miles. The total length of sewers in the District of Columbia on June 30, 1908, is 521.19 miles. The total cost of the sewer system at the close of the fiscal year was \$15,972,204.56.

SUBURBAN SEWERS.

The commissioners have asked in their estimates to Congress for an appropriation of \$120,000 to construct suburban sewers. It is intended with this appropriation to construct certain of the smaller trunk lines and also service sewers in the outlying sections of the District. In addition, special appropriations will be asked for suburban sewers to serve the subdivisions of Brookland and North Columbia Heights and subdivisions lying along the Piney Branch Valley and the upper part of Rock Creek. The development of these suburbs depends to a great extent upon affording sewer and water facilities, and the amounts expended for this purpose are returned in the way of assessments for sewers and by the increased valuation of the property thus developed.

SEWERAGE PUMPING STATION.

The sewerage pumping station has been in operation throughout the year. The total quantity of sewage handled by the pumps was 25,016,147,000 gallons, or an average of 68,370,000 gallons per day. In operating these pumps 6,330,000 pounds of coal was consumed. This station meets all the requirements of the usual pumping service and handled without difficulty the rainfalls on the low district during a number of storms of exceptional precipitation. The opera-

tion of the station required the removal of 87,258 pounds of solid material from the screens and about 301,000 cubic feet of sand, gravel, and detritus from the sediment chamber.

BUILDINGS.

The estimated value of building work during the year, not including buildings of the United States Government, was \$8,711,577, which was a decrease from value of building work during the preceding fiscal year of \$4,000,895. The number of permits issued was 8,897, a decrease from the previous year of 965. The number of dwelling houses constructed was 1,224, a decrease of 27 from last year's figures, and the number of apartment houses 33, an increase of 7 over those constructed during the previous year. One hundred and thirty-five business buildings were erected, being a decrease of 42 from the previous year.

The distribution of the value of these improvements and also of repairs to existing buildings is as follows:

| Section. | Buildings. | Repairs. |
|----------------|----------------|----------------|
| Northwest..... | \$1,809,954.00 | \$1,035,014.00 |
| Southwest..... | 330,573.00 | 107,406.00 |
| Northeast..... | 463,638.00 | 53,380.00 |
| Southeast..... | 256,144.00 | 59,016.00 |
| County..... | 4,118,031.00 | 419,301.00 |
| Total..... | 6,978,340.00 | 1,674,117.00 |

There are estimated to be 51,196 brick buildings and 22,794 frame buildings in the District of Columbia.

The following municipal buildings were constructed under the direction of the inspector of buildings during the year, the cost being exclusive of the cost of site:

MUNICIPAL BUILDINGS ERECTED UNDER SUPERVISION OF INSPECTOR OF BUILDINGS OFFICE.

| | |
|--|-------------|
| Addition to Eastern Market, Seventh street and North Carolina avenue SE. | \$23,298.00 |
| Chemical engine house, Twenty-second street, between Franklin and Everts streets NE. (Langdon, D. C.)..... | 16,400.00 |
| John H. Ketcham School, No. 149, Adams, Jackson, and Harrison streets SE. (Anacostia, D. C.)..... | 42,500.00 |
| John P. Van Ness School, No. 150, Fourth and M streets SE..... | 45,650.00 |
| Six-room school, No. 108, Twentieth street and Queens Chapel road NE. (Langdon, D. C.)..... | 22,993.00 |
| Four-room school, No. 131, Shepherd street, between Eighth and Ninth streets NW. (Petworth)..... | 23,687.00 |
| Four-room school, N. P. Gage, No. 143, Second and Elm streets NW..... | 20,683.00 |
| Four-room school, Matthew G. Emery, No. 133, Lincoln road and Prospect street NW..... | 21,533.00 |
| Four-room school, No. 151, Ninth and Ingraham streets NW. (Brightwood). | 26,316.00 |
| Four-room school, No. 152, Whittingham and Lane place NE. (Deanwood). | 26,384.00 |
| Chemical engine house, Minnesota avenue, between Hune Place and Sherwood avenue NE. (Bennings, D. C.)..... | 15,939.00 |
| Municipal crematorium, reservation No. 13, Twenty-first and B streets SE. | 14,561.00 |
| Extension to McKinley Manual Training School, Seventh street and Rhode Island avenue NW..... | 108,340.00 |
| Cement storehouse, Fourteenth and D streets SW..... | 7,995.00 |
| Truck and engine house, Lanier place, between Ontario road and Adams Mill road NW..... | 23,547.00 |
| Total..... | 441,826.00 |

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| Municipal crematorium, reservation No. 13, Twenty-first and B streets SE. | 14,561.00 |
| Extension to McKinley Manual Training School, Seventh street and Rhode Island avenue NW..... | 108,340.00 |
| Cement storehouse, Fourteenth and D streets SW..... | 7,995.00 |
| Truck and engine house, Lanier place, between Ontario road and Adams Mill road NW..... | 23,547.00 |
| Total..... | 441,826.00 |

The fees received for building permits during the year amounted to \$7,633, a decrease of \$451 from the fees of the preceding year.

The following municipal buildings were erected during the year, but were not constructed under the supervision of the inspector of buildings:

| | |
|-------------------------------------|------------|
| Bathing Beach..... | \$8,938.00 |
| Tuberculosis Hospital..... | 86,552.00 |
| Stable, Industrial Home School..... | 1,297.00 |
| Stable, Water Department..... | 21,300.00 |
| Total..... | 118,087.00 |

Work of planning and erecting the following municipal buildings is now in progress:

Sixteen-room school building, No. 153, at Fourth and W streets NW., 60 per cent completed.

Sixteen-room school building, No. 154, Seventeenth and Euclid streets NW., 70 per cent completed.

Twelve-room school building, No. 155, B street, between Thirteenth and Fourteenth streets SE., 55 per cent completed.

Administration building, workhouse for males, reservation No. 13, bids received, but contract not yet awarded.

Plans for truck house, southwest, will be completed latter part of September, 1908.

The 16-room school buildings, Nos. 153 and 154, are in course of construction and will be completed about January 1, 1909. The 12-room school building, No. 155, will be completed about February, 1909. Thirteen portable schoolhouses are in course of erection.

INSPECTION OF PRIVATE BUILDINGS.

All private buildings in course of construction in the District require inspection by this office. During the year about 4,983 buildings have been erected or altered, and the inspections of these buildings are made by 8 field inspectors. Each man is required to make 20 inspections a day and about 12 visits to each building. This is entirely insufficient to insure that the buildings are constructed in accordance with the building regulations. A sufficient force should be provided in the office of the inspector of buildings so as to double the number of visits to each building and require an inspector to make only 10 thorough daily inspections instead of 20 hasty and unsatisfactory calls, which is all that can be done by the present force.

INCREASE IN BUILDING FORCE.

During the year an accident occurred in the erection of an apartment house at the corner of Twentieth and P streets NW., in which one man was killed and another injured. The coroner held an inquest over the body of the man who was killed and the jury brought in a verdict holding the owner of the building, one of the contractors, and the inspector of buildings until the grand jury could investigate the question as to responsibility for the accident. The matter was then taken up by the grand jury, which exonerated the inspector of buildings, and in its verdict called attention to the inadequacy of the force in the office of the building inspector and of the compensation paid to the assistant inspectors of buildings. Subsequent to the verdict of the grand jury the commissioners investigated the office of the inspector of buildings with a view to determining what means

were necessary to provide for more thorough inspections. As a result, of this examination in their estimates to Congress for the ensuing fiscal year they will ask not only for an increase in force but an increase in compensation of the employees. With the salaries provided by Congress for the employees of this office it is difficult to keep competent men. Such men can secure an increased compensation either with the Federal Government or in private work, and many of them leave the office to accept such positions. The commissioners desire an increase in the force and also increased salaries, so that incentives can be offered to good men to enter the service and to insure them promotion, so as to keep them in the service.

FIRE ESCAPES.

Congress at its last session made provision for an inspector of fire escapes, whose duty it is to examine all buildings coming under the fire-escape law to see that fire escapes and other fire appliances are installed. Previous to this, the work was required to be done by the field force of the building inspector's office in addition to their other duties. It is estimated that there are 12,000 buildings which need such examination, and at the present rate of inspection, with only one man employed, it will probably take about four years or more to cover the ground.

INSPECTION OF HEATING APPARATUS.

The commissioners have requested in their estimates an appropriation for an inspector of heating apparatus whose duty it would be to pass on the installation of heating apparatus in private buildings, and also to give advice and supervision as to such apparatus in municipal buildings and prepare plans for same. The District has now over 200 buildings which contain expensive heating and ventilating plants which should be supervised by an expert. During the year it has been necessary to employ expert services for such work on a percentage basis, and the amount of money paid under this method would more than equal the salary of such an employee.

MUNICIPAL ARCHITECT.

The commissioners again call attention to the necessity for the creation of the office of municipal architect. They believe that the work of the inspector of buildings has become so great that the duties of the office should be divided so that the inspector of buildings would, as his office indicates, have supervision of the inspection of buildings, and that the designing of municipal buildings, which is now performed under his supervision, should be under the supervision of a new office, which the commissioners believe should be created, namely, that of municipal architect. It would be the duty of this officer to supervise the preparation of designs for and the construction of all municipal buildings for which appropriations are made by Congress and also to supervise repairs and improvements on existing buildings. The commissioners have this year recommended appropriations for a number of public-school and other municipal buildings, and they believe that a necessity now exists for this officer.

ARCHITECTS' AND BUILDERS' LICENSES.

The commissioners recommend legislation requiring all architects and builders practicing their professions in the District of Columbia to be licensed. There is as much reason for licensing these professions as there is for licensing the practice of medicine and law and the business of plumbing and gasfitting, which are required by law to be licensed. Under the present building regulations, as authorized to be made by the commissioners, anyone desiring a permit to build can obtain such permit upon application, although it might be known by the inspector of buildings that he has not sufficient knowledge of building construction to carry on the work. It is the intention of the commissioners to prepare legislation, to be presented at the next session of Congress, which will cover this matter.

REVISING BUILDING REGULATIONS.

The work of revising the building regulations of the District of Columbia, which is being performed by the volunteer committee appointed by the Commissioners of the District of Columbia, is about completed. Much arduous labor was involved in this work, and as the members of the committee served without compensation, at a great sacrifice of their time, the work has necessarily been delayed.

REPAIRS TO BUILDINGS.

The sum of \$70,000 was spent in repair work on school buildings, which is about $1\frac{1}{3}$ per cent of the value of these buildings, this value being about \$6,500,000. In the repair of engine houses and grounds \$8,000 was expended, which is about $2\frac{1}{10}$ per cent of the valuation of this class of property. In the repairs to police stations \$4,750 was expended, which is about $1\frac{3}{10}$ per cent of the valuation of such buildings. In the ordinary repairing of plumbing in school buildings \$6,000 was expended. The greater part of this work is done by day labor under the supervision of the superintendent of repairs, and includes carpentering, painting, tinning, grading, paving, white-washing, plastering, etc.

The commissioners would call attention to the necessity of increasing the size of these appropriations as recommended by them in their estimates.

PLUMBING AND PLUMBING INSPECTION.

During the year the plumbing office made 29,547 inspections, which is a decrease from the number of inspections made last year of 2,553. This was due to the decrease in building operations as a result of the financial stringency which occurred during the year.

The sum of \$50,000 was expended under the direction of the inspector of plumbing in making repairs and changes in the plumbing of the older school buildings, so as to bring them up to modern sanitary requirements. The plumbing work in 10 school buildings was completely remodeled. The work of improving the plumbing conditions in these school buildings must, however, be kept on, as a number of them still contain old-style insanitary plumbing, and the commis-

sioners have included in their estimates an item of \$40,000 for similar work during the next fiscal year.

This office has also charge of the installation of plumbing in private residences under the compulsory-drainage act, and upon the failure of the owner after notice to do the work it is done by the inspector of plumbing and the cost assessed against the property. At the beginning of the fiscal year there were 36 such cases on hand, and during the year 82 new cases were taken up, making a total of 118 premises. Of these cases the owners subsequently installed plumbing in 46, and in 16 other cases the buildings were torn down. This work involved an expenditure of \$2,434.75, for which assessments were made against the property. Every effort is made to induce the owner to comply with the law, in order that compulsory action on the part of the office in installing the plumbing will not be necessary, and much successful work of this character is accomplished by the inspector of plumbing.

PUBLIC-CONVENIENCE STATIONS.

The District of Columbia now has two public-convenience stations, one located above ground at Seventh street and Pennsylvania avenue NW., and the other below ground at Thirteenth street and Pennsylvania avenue NW. An appropriation was made by the last Congress for the construction of another station at Seventh and K streets NW, below ground on a public reservation at that point, and steps are being taken toward the erection of this station. The total number of patrons reported for the two existing stations during the year was about 2,000,000, being practically 1,000,000 for each station. The number of daily patrons was about 5,272, and this great amount of use amply demonstrates the necessity for such conveniences. Of the total patronage of the stations $12\frac{1}{2}$ per cent were women. A portion of the conveniences provided for in the station are free to the public and the other conveniences are paid for by small fees. The money received from this source amounted during the year to \$746.75. The cost of operating the stations, including all expenses, amounted to $3\frac{1}{8}$ mills per person, and subtracting the receipts from fees it amounted to about $2\frac{3}{4}$ mills per person.

The commissioners believe that during the next fiscal year one new public-convenience station should be constructed at an estimated cost of \$22,500, to be located at some point in the city which will afford facilities to the greatest number of persons.

PUBLIC BATHS.

Hand in hand with the matter of public-convenience stations should be considered the construction of public baths. The commissioners asked an item for the construction of a public bath in their last estimates to Congress, and it is their intention to make a similar request in their estimates for the fiscal year 1910. These establishments exist in a number of cities where the demand for such modern conveniences has been supplied, and the same reasons for constructing them apply in the city of Washington. There is a large class of people who have no facilities for bathing at their homes, and

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it is this class which the public baths would reach. Their construction would promote cleanliness among the poorer population and aid in civic improvement.

STREET RAILWAYS.

On May 23, 1908, an act was passed authorizing certain extensions to be made in the street-railway lines in order to reach the new Union Station. The bill authorized temporary tracks in Delaware avenue NE., from C street to the station, which tracks were required to be laid and cars operated within thirty days from the passage of the act. An overhead line, on which were operated two shuttle cars, was constructed within the time named in the act, and as a temporary measure was of great advantage to those using the station. The law required that the permanent construction should be completed on or before May 1, 1909, and work of installing this construction is progressing rapidly. In addition to the lines necessary to reach the Union Station the act also authorized an extension of the lines of the Capital Traction Company from Florida and New Jersey avenues NW. to F and Eighth streets NE., by the way of Florida avenue and Eighth street. This measure had long been demanded by the citizens in the eastern section of the city who, for years, have felt the necessity of a cross-town line, and the commissioners were much gratified when the line was authorized.

In this legislation the obligations formerly placed by law on the commissioners to require the street-railway companies to provide sufficient cars and to operate them with sufficient frequency and at a proper rate of speed was taken from the commissioners and transferred to the Interstate Commerce Commission. This commission was given ample power to enforce such regulations as it might make on the subject in order to compel obedience to such regulations. Prior to the passage of this law the charters of the railroad companies required them to furnish a sufficient number of cars and to operate the same on schedules to be approved by the commissioners, but in the charters there were no penalty provisions, so that the regulations of the commissioners could not be enforced. The commissioners submitted a bill to Congress authorizing them to regulate the operation of street-railway cars and to enforce such regulations as they might make by adequate penalties, but this bill was never passed, and instead the power was granted to the Interstate Commerce Commission.

While the commissioners welcomed legislation upon the matter they believed that they, as executive authorities of the District of Columbia, should be clothed with this power rather than it should be granted to the Interstate Commerce Commission, a body whose duties are more applicable to interstate railways than to local affairs.

ROCK CREEK PARK.

The appropriation for the care and maintenance of the park during the year was \$15,000. This was spent in the general care and maintenance of roads, bridle paths, and open spaces; also in the completion of the bridge on the line of Ross road. For the ensuing fiscal year an appropriation of \$25,000 should be made for the park. This

will provide for care and maintenance of the park and also for constructing an approach to the park in Biddle parkway from Sixteenth street along the valley of Piney Branch, for which ground was acquired during the year. The commissioners would also invite attention to two bills which are pending in Congress for the purchase of land for additions to Rock Creek Park along the line of Sixteenth street and along Massachusetts avenue extended. This land should be acquired at once, as it is necessary to round out the park and can be purchased now at a reasonable figure.

ROCK CREEK VALLEY IMPROVEMENT.

The commissioners made and submitted to Congress a report upon the improvement of the valley of Rock Creek from Massachusetts avenue to the Potomac River. This was printed as Senate document No. 458, Sixtieth Congress, first session. The commissioners recommended that the open-valley method of improvement be adopted at a cost of \$4,700,000, of which they ask an appropriation of \$500,000 during the next fiscal year, this appropriation to be expended toward acquiring the necessary land, making surveys, and starting the project, which should be completed within six years.

This improvement should be executed as early as possible, as the existing conditions are unsuitable and insanitary and retard the proper development of this section of the city.

WATER MAINS.

About 15 miles of water mains were laid during the year, making the total length of water mains in use at the end of the fiscal year 460 miles. Ninety-three new fire hydrants, 12 public hydrants, and 3 public horse fountains were erected. The total number of fire hydrants in service is 2,429, public hydrants 285, and horse fountains 126. Fifty-four shallow wells and 2 deep wells were closed, leaving in service at the close of the year 11 shallow wells and 31 deep wells.

The revenues of the water department are sufficient to take care of the ordinary extensions of mains, but are insufficient to construct a number of large trunk mains which are necessary at the present time in order to provide water to certain outlying subdivisions. The commissioners have therefore requested in their estimates to Congress an appropriation of \$314,000 to construct water mains in the following localities:

- Thirty-inch main from Kentucky and Potomac avenues to Twining City.
- Twenty-inch main from Twining City to Congress Heights.
- Twenty-inch main from Twining City to Benning.
- Twenty-inch main from Reno Reservoir to Pinehurst.
- Thirty-six-inch main from pumping station to Brookland, D. C.
- Twelve-inch main to extend fire protection to reform school.

The commissioners have requested that these trunk mains be provided for in the same manner as other expenses of the District of Columbia—that is, one-half from general revenues of the District of Columbia and the other half from money in the United States Treasury—with the condition attached that these funds shall be repaid from revenues of the water department at the rate of 5 per

cent per annum, beginning with the fiscal year 1910, until the entire sum is repaid. It is only in this manner that the work can be undertaken promptly. The water revenues will not be sufficient to do the work for a number of years to come, and then it would have to be done gradually. It is very important that an appropriation be made for the purpose, as all these important suburbs—Congress Heights, Benning, Kenilworth, and Pinehurst—are at present without water facilities, and as they are being rapidly developed such facilities should be furnished. If the appropriation is made the work could be done within the next fiscal year.

ADDITIONAL WATER SUPPLY.

The commissioners again call attention to the necessity for an additional water supply as recommended in their annual report for last year, which was as follows:

ADDITIONAL WATER SUPPLY.

Attention is again invited to the necessity for the erection of another conduit from Great Falls to the city. The present conduit, which was built in 1854, is not in as good a condition as it should be, and in case of any accident happening to it the entire water supply would have to be cut off until repairs were made. Besides, the ultimate capacity of this conduit is 90,000,000 gallons, while the average daily consumption of water is 68,000,000 gallons, and during the cold of winter when the water users allow their faucets to run to prevent freezing the consumption has reached 106,000,000 gallons and remained at that figure for several days, resulting in lowering the water in the reservoirs 5 feet. This additional conduit has also been recommended by the Chief of Engineers.

In the District appropriation act for the fiscal year 1909 an appropriation of \$10,000 was made for the purpose of making preliminary investigations and surveys. It is understood that a report will be made to the next Congress by the Secretary of War of the result of such investigations.

WATER REVENUES.

During the year 1,709 additional buildings were connected with the public water system. The revenues during the year were \$547,507.95. These revenues are made up from assessments levied for water mains and from water rents. This sum is an increase over the revenues of the last fiscal year of \$11,557.03.

WATER METERS.

Four thousand three hundred and thirty-nine water meters were installed in private residences during the year, making the total number now in use 12,606. These meters were installed in the northern part of the city and county embracing the portions of the District served by the pumping station and also a portion of the city supplied by gravity. Included in this territory are the subdivisions of Brookland, Langdon, and Eckington, and the Conduit road and that portion of west Washington extending to the water front and as far east as Rock Creek. The portion of the city in the vicinity of Florida avenue to Rhode Island avenue and Fourth street west to Eckington east was completed. The work will be continued until all private residences are supplied with meters. The average cost of the instal-

lation of meters is \$19.25 for a meter five-eighths inch in size and \$23.44 for a meter three-fourths inch in size.

The early and vehement objection on the part of some of the residents to the installation of these meters has practically subsided, and it is believed that the citizens appreciate that this is the only accurate method of determining the charges for the use of water. These meters also prevent the waste of water, which had assumed large proportions prior to their installation. The rate charged is 3 cents per 100 cubic feet, with a minimum rate to all consumers of \$4.50 per annum. Water-rent bills are delivered to householders annually at the minimum rate, and if, on actual measurement taken of the meter, water is used in excess of this rate, as calculated upon the basis of 3 cents per 100 cubic feet, a bill is rendered for the excess water used.

TRANSFER OF WASHINGTON AQUEDUCT AND FILTRATION PLANT TO THE COMMISSIONERS.

The bill introduced in the last Congress providing for the transfer of the Washington Aqueduct and filtration plant to the commissioners failed to become a law, and the commissioners earnestly recommend that such a law be passed at the next session of Congress. The jurisdiction over the water-supply system is now placed by law under the Chief of Engineers of the United States Army, while the jurisdiction of the water-distribution system is under the commissioners. It would tend to much better administration if the entire water system was under one control. The division causes a division of responsibility, the duplication of work, and the employment of a duplicate force. Part of the water mains are under the control of the War Department and part under the control of the commissioners. The water distributed flows from one set of mains to the other and back again in the supply of government and private buildings. The Chief of Engineers has recommended such a transfer.

HARBOR FRONT.

The commissioners submitted to Congress at its last session a special report on the improvement of the harbor front of the city of Washington, and this report was printed as Senate Document 519, Sixtieth Congress, first session. In this report the commissioners recommended the improvement at an estimated cost of \$2,880,000. Of this sum the work of improving the harbor front of the city itself was estimated at \$2,775,000, of which \$1,426,000 was for the building of new bulkhead walls, new piers, and improving Water street, and the balance was for moving back and rebuilding the sea wall on the opposite side of the river and of dredging the river itself, which work is under the jurisdiction of the War Department. The balance of the sum recommended was for the purchase of land abutting the water front between Shepherds Landing and Giesboro Point and from Giesboro Point to Massachusetts avenue, and for the preparation of plans and surveys for the reclamation of the Anacostia River from Massachusetts avenue to the District line.

The most casual observation of the water front of the city of Washington demonstrates the necessity for its improvement. This wharf

property came under the control of the commissioners of the District of Columbia about the year 1903 and then consisted of a lot of frame structures in a bad state of repair, and practically the same condition exists to-day.

The improvement contemplates the tearing down of all existing structures, the rebuilding of bulkhead walls, and the construction of docks which would be leased for passenger and freight traffic. The revenue received from these wharves amounts to about \$17,000 a year. This can be greatly increased if more adequate facilities were furnished shipping interests. The purchase of the land referred to would give the District of Columbia control of practically all the river frontage in the District, with the exception of that portion on the Georgetown channel. The commissioners believe that this improvement should be started at once by appropriating money for the purpose, and they have asked for an appropriation of \$300,000, to start the work, in their estimates to Congress.

CONDEMNATION OF INSANITARY BUILDINGS.

The board for the condemnation of insanitary buildings examined 510 of such buildings and issued orders requiring 341 of them to be demolished and 130 to be repaired. Of the buildings demolished, 217 were located on streets and 124 in alleys, and of those repaired, 66 were located on streets and 64 in alleys. The total number of buildings examined by the board since its creation on May 1, 1906, was 959, of which 545 were ordered to be demolished and 224 repaired. Of the number demolished 332 were in streets and 213 in alleys, and of those repaired 127 were in streets and 97 in alleys. By reason of the demolition of houses 629 adults and 427 children were required to find new quarters. The assessed valuation of the buildings removed was \$40,800.

The law authorizes the condemnation board to remove buildings upon neglect or refusal of the owners to do so, and under this authority the board removed 8 buildings, 3 of which were in streets and 5 in alleys. There was no charge against the appropriation for this work as the materials contained in the buildings paid for their cost of removal.

The value of this legislation in requiring the removal of tumble-down buildings which are a menace to the safety and health of the occupants can hardly be estimated. The tenants of these structures usually go to the suburbs and rent or purchase homes or find quarters in other more substantial structures. One arrangement which is very much used is for two families to rent one substantial house, one taking the lower part of the house and the other the upper. There is at the present time, however, a demand for a cheaper class of house to take the place of those destroyed. Bad housekeeping and general neglect is responsible for a great many houses being brought to the attention of the board.

PARKS.

The commissioners again invite attention to the desirability of extending the park system in the built-up portions of the District similar to that existing within the city limits. Certain portions of

the District which are practically parts of the city, but which lie outside of the old city boundary, have been built up without provision being made for parks. On account of the value of the land it would be an expensive measure to provide parks in such sections at this time, but it is believed that in the newer sections parks should be purchased or condemned before the property is built upon. The beauty of the city of Washington is dependent to a great extent upon its trees and parks, and the present admirable system of parks within the city limits should be extended throughout the District. This should be done in a systematic manner.

TRANSFER OF CONTROL OF PARKS TO THE COMMISSIONERS.

The commissioners again recommend the transfer to their jurisdiction of the system of parks in the city of Washington, exclusive of the grounds around the White House and the Government buildings. Jurisdiction over these parks is now placed by law under the Chief of Engineers of the United States Army, and the commissioners recommend either that the entire control be transferred to them or that a board of control, such as that which has charge of Rock Creek Park, consisting of the Commissioners of the District of Columbia and the Chief of Engineers of the United States Army, be given entire control of the park system, with the exceptions above noted. The cost of maintaining these parks is shared by the citizens of the District of Columbia, and it seems but proper that the commissioners, who are the executive authorities of the District, and responsible for the collection and disbursement of money for municipal purposes, should have charge of the parks as well as other municipal establishments. Under the present arrangement Congress appropriates money for the maintenance of these parks, one-half of which is charged against the citizens of the District of Columbia, and the commissioners have no opportunity to make any recommendations as to such expenditures, although, in preparing their own estimates, they must take into consideration the amount of the revenues and provide for expenditures justified by such revenues. If the control of the parks were under the Commissioners their improvement could be considered in connection with other public improvements and the parks given their relative share of money available.

Very respectfully,

HENRY B. F. MACFARLAND,
HENRY L. WEST,
JAY J. MORROW,

Commissioners of the District of Columbia.

REPORT OF THE OPERATIONS OF THE ENGINEER DEPARTMENT.

SURFACE DIVISION.

Capt. EDWARD M. MARKHAM,

Corps of Engineers, United States Army, Assistant to the Engineer Commissioner, in charge.

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|---|--|
| HIGHWAYS (STREETS, ROADS, BRIDGES, ETC.)..... | C. B. HUNT, <i>Engineer of Highways.</i> |
| Sidewalks and alleys..... | H. N. MOSS, <i>Superintendent of Streets.</i> |
| Construction and maintenance of county roads..... | L. R. GRABILL, <i>Superintendent of County Roads.</i> |
| Construction and care of bridges..... | W. J. DOUGLAS, <i>Engineer of Bridges.</i> |
| STREET EXTENSIONS..... | E. M. TALCOTT, <i>Assistant Engineer.</i> |
| ASPHALT AND CEMENT..... | J. O. HARGROVE, <i>Inspector of Asphalt and Cements.</i> |
| SURVEYOR'S OFFICE..... | W. P. RICHARDS, <i>Surveyor, District of Columbia.</i> |
| PARKING COMMISSION..... | TRUEMAN LANHAM, <i>Superintendent of Trees and Parking.</i> |
| GRADE DAMAGES..... | A. L. SINCLAIR, <i>Special Assistant Counsel.</i> |

REPORT OF ASSISTANT IN CHARGE.

OFFICE OF THE ENGINEER COMMISSIONER
OF THE DISTRICT OF COLUMBIA,
Washington, October 21, 1908.

MAJOR: I have the honor to transmit herewith annual reports, giving in detail the operations during the fiscal year ended June 30, 1908, of the surface division, the surveyor's office, the parking commission, the office of street extensions, the office of the inspector or asphalt and cements, and the special assistant corporation counsel in charge of grade damages. In the report of the surface division is included the reports of the engineer of highways, the superintendent of streets, the superintendent of roads, and the engineer of bridges.

Very respectfully,

E. M. MARKHAM,
*Captain, Corps of Engineers, U. S. Army,
Assistant to the Engineer Commissioner.*

Maj. JAY J. MORROW,
*Corps of Engineers, U. S. Army,
Engineer Commissioner, D. C.*

REPORT OF THE ENGINEER OF HIGHWAYS.

WASHINGTON, D. C., *September 26, 1908.*

SIR: I have the honor to submit the following report of the operations of the surface division of the engineer department of the District of Columbia for the fiscal year ended June 30, 1908:

The total amount of funds appropriated by Congress and deposited by corporations and others for disbursement by the surface division during the fiscal year ended June 30, 1908, aggregated about \$1,285,000, of which about \$200,000 was for paving

sidewalks and alleys in all parts of the District of Columbia; \$485,000 was for paving new streets and for repairing and repaving old ones within the city limits; about \$218,000 was for construction and repair of suburban streets and county roads; \$15,000 for grading streets and alleys, and \$4,000 for a survey and plan of treatment of Rock Creek valley; about \$65,000 for the maintenance and construction of all bridges in the District; about \$175,000 in connection with the elimination of grade crossings; while approximately \$150,000 was spent in repairing pavements disturbed by excavations on account of other branches of the District government and by various corporations and plumbers.

Summary statement of work done under appropriation for improvements and repairs for the year ended June 30, 1908.

| Character of work. | Streets and avenues. | County roads and suburban streets. | Elimination of grade crossings. | Repairs to asphalt pavements. | Total. |
|--|----------------------|------------------------------------|---------------------------------|-------------------------------|---------|
| Street asphalt paving.....square yards.. | 25,052 | 12,671 | 35,794 | 32,806 | 106,323 |
| Asphalt resurface.....do..... | | | 387 | 36,933 | 37,320 |
| Vitrified block gutters.....do..... | 1,722 | 1,050 | 5,055 | 5,034 | 12,861 |
| Asphalt block paving.....do..... | 23,586 | 1,986 | | | 25,572 |
| Granite block paving.....do..... | | | 2,838 | | 2,838 |
| Macadam roadway.....do..... | | 27,867 | | | 27,867 |
| Cobble gutters.....do..... | | 4,182 | | | 4,182 |
| Ordinary grading.....cubic yards..... | 15,456 | 178,595 | a 262,994 | 3,410 | 460,455 |
| Macadam grading.....do..... | 4,581 | 1,327 | 650 | | 6,558 |
| Old pavement removed.....do..... | | | | 10,787 | 10,787 |
| Old cobble removed.....square yards..... | 9,215 | 3,855 | 15,319 | | 28,389 |
| Old curb removed.....linear feet..... | 9,005 | 2,947 | 1,186 | 10,226 | 23,364 |
| Curb set.....do..... | 16,639 | 10,280 | 1,252 | 10,697 | 38,868 |
| Curb reset.....do..... | 12,788 | 1,641 | 5,495 | 8,903 | 28,827 |

a Includes increment of 252,655 cubic yards earth filling in Plaza and vicinity.

The principal items of work under the appropriation for "Repairs to roads" were the following:

Macadamizing Connecticut avenue extended between Pierce Mill and Grant roads; Belt road between Tenleytown road and Livingston street; Canal road west of New Cut road; Brightwood avenue between Irving street and Rock Creek Church road; Newton street between Fourteenth street and Piney Branch road; Livingston road between Oxen Run and the District line.

The following is a list of tables appended with this report:

Table A.—Street railways in the District of Columbia, July 1, 1907.

B and C.—Statement of character and extent of street pavements.

E.—Schedules of work on streets and avenues and county roads and suburban streets.

F.—Repairs to asphalt and concrete pavements.

G.—Work done at cost of railway companies.

H.—Work done by day labor under appropriation for "Current repairs to streets, avenues, and alleys."

I.—Regular permit work.

K.—Assessment work.

L.—Replacing and repairing sidewalks and curbs around public reservations.

M.—Miscellaneous work.

N.—Whole-cost work.

O.—Repairs to cuts made by plumbers and others.

P.—Grading by chain gang.

No changes of note were made in the practice of paving streets and alleys from that of recent years, either in regard to types of pavement or as to specifications of those used. Some use was made of oil and tar products on roadways as a dust preventive and as a preservation of the surface from the destructive influences of fast automobile traffic and with such success that it will be continued on a larger scale.

The limit of legal rate to be paid for asphalt pavements was restored to \$1.80 per square yard by Congress and this action enabled contracts for this type of pavement to be secured, whereas under the limit of \$1.65 fixed for 1907 work this had proved impracticable. The general progress of the year's work was satisfactory. About 21,016 cubic yards of trap macadam from the District's quarry at Dickerson, Md., was used on various highways during the year with continued excellent results.

This material cost about \$1.50 per cubic yard, f. o. b. cars at Washington, and while the haul thence to the site of the work is sometimes a large item, yet the high quality of the resulting road is a clear justification of the real economy of its continued use.

The resurfacing of Pennsylvania avenue NW. from Sixth street to Fifteenth street was completed and resulted in a radical and much needed betterment in this thoroughfare. The total cost of this work was approximately \$140,000, exclusive of the repaving of certain adjacent streets (Seventh, Twelfth, Thirteenth, E, etc.), executed in connection with this work, and exclusive of the cost of raising and repaving the street railway tracks, which was paid for by the Capital Traction Company.

ELIMINATION OF GRADE CROSSINGS.

With relatively minor exceptions, the work to be done by the various railroads under the legislation authorizing this work has been completed.

The Plaza fill has been substantially completed, only such small portions of intersecting streets as are reserved for the deposit of surplus grading from other public work being still unfilled. The paving of the Plaza and its intersecting streets must, from physical necessity, await the settlement of the material placed therein; but with few exceptions—and they are about to be provided for—all other streets required to be changed in line or grade have been repaved at their new grades.

I recommend that such grade crossings of steam railroad tracks as still exist outside the city limits be eliminated by progressively securing appropriations for the purpose, and would particularly suggest for early consideration the one at Tacoma Park and the one at Benning.

RECOMMENDATIONS.

I renew my recommendation of past years that the appropriation yearly made for "Construction of county roads" be aggregated into a single appropriation, to be expended on the roads named in the bill in a manner analogous to the operation of the schedule for paving streets within the city. About a score of items for suburban street work are yearly segregated in an anomalous manner. They should be disbursed and accounted for as a single fund. The accounting office concurs in this recommendation.

I renew my recommendation made last year that collections of special assessments for improvements under assessment and permit work be credited in equal parts to the United States and the District of Columbia instead of to the current appropriation, and that appropriations as made by Congress be increased by the total of these collections, as shown by past experience. The amount to be expended would thus be known in advance not only by Congress, but by the office charged with the execution of the work under the appropriation.

My acknowledgments are due to the employees of the surface division for the work accomplished by the office during the year.

I respectfully transmit herewith the reports of the superintendent of streets, the superintendent of county roads, and engineer of bridges.

Very respectfully,

C. B. HUNT,
Engineer of Highways.

Capt. EDWARD M. MARKHAM,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

REPORT OF THE SUPERINTENDENT OF STREETS.

WASHINGTON, September 25, 1908.

SIR: I have the honor to submit herewith the annual report of the operations under my charge for the fiscal year ended June 30, 1908. Table H is a summary of work done by day labor under the appropriation for "Current repairs to streets, avenues, and alleys." The cost of such work was \$26,126.43, including the repairs to 3,328 dangerous holes. One-third of this amount was sidewalk and alley work and the other two-thirds repairs to street roadways.

Table I is a list of work done under the permit system, wherein property owners requested the improvement and paid one-half the cost, the District paying the other half. The total cost of this work was \$22,453.10.

Table K is a list of work done under the assessment system. One-half of the cost of such work is charged against the abutting property. The total cost was \$244,174.29.

Table L is a list of work paid for from the appropriation for "Replacing sidewalks and curbs around public reservations and municipal buildings." The amount expended under this class of work was \$2,759.14.

Very respectfully,

H. N. Moss,
Superintendent of Streets.

The ENGINEER OF HIGHWAYS.

REPORT OF SUPERINTENDENT OF COUNTY ROADS.

WASHINGTON, September 26, 1908.

SIR: I have the honor to submit herewith the report of the operations of the county road division during the fiscal year ended June 30, 1908.

Very respectfully,

L. R. GRABILL,
Superintendent of County Roads.

The ENGINEER OF HIGHWAYS.

Repairs to county roads, appropriation 1908.

| Job No. | Location. | Cost. |
|------------|--|-------------|
| SECTION 1. | | |
| 4007 | Connecticut avenue between Pierce Mill and Grant roads..... | \$11,256.07 |
| 4016 | Daniels road..... | 296.75 |
| 4027 | Belt road between Tennallytown road and Livingston street..... | 9,913.40 |
| 4040 | Pierce Mill road from Connecticut avenue to Wisconsin avenue..... | 434.45 |
| 4045 | East side Twenty-fourth street n.w., Bancroft place to T street..... | 56.65 |
| 4047 | Loughboro road from Wisconsin avenue west..... | 189.00 |
| 4060 | Canal road west of New Cut road..... | 5,191.40 |
| 4068 | Connecticut avenue between Pierce Mill and Grant roads..... | 1,383.05 |
| 4070 | Murdock Mill road and streets in American University Park..... | 673.75 |
| | | 29,394.52 |
| | Dangerous holes and minor repairs..... | 7,993.75 |
| | | 37,388.27 |
| SECTION 2. | | |
| 4008 | Monroe street n.w. between Holmead place and Thirteenth street..... | 627.50 |
| 4010 | Piney Branch road..... | 693.99 |
| 4011 | Park avenue, Brightwood (road "A")..... | 78.25 |
| 4012 | Harewood road between Michigan avenue and Rock Creek Church road..... | 1,170.81 |
| 4019 | Park road between Eighteenth and Nineteenth streets..... | 119.00 |
| 4020 | Newton street between Fourteenth street and Piney Branch road..... | 5,638.93 |
| 4021 | Sixth street n.w. between Pomeroy and College streets, and Trumbull street between Brightwood avenue and Sixth street..... | 2,234.85 |
| 4042 | Fifth street n.w. between U and V streets..... | 84.75 |
| 4046 | Kenyon street between Brightwood and Sherman avenues..... | 240.99 |
| 4048 | Brightwood avenue between Gresham and Hobart place..... | 110.25 |
| 4058 | Brightwood avenue between Irving street and Rock Creek Church road..... | 2,831.68 |
| 4061 | Fairmont street between Sherman avenue and Eleventh street..... | 180.37 |
| 4071 | Various streets (treat with tar)..... | 1,331.10 |
| 4079 | Fourteenth street extended between Quincy and Randolph streets..... | 198.38 |
| 4082 | Park road from Soldiers' Home to Warder place..... | 471.83 |
| 4089 | Piney Branch road between Piney Branch and Seventeenth street..... | 50.50 |
| 4090 | Unimproved streets in Brightwood Park..... | 747.32 |
| 4091 | Lanier place..... | 144.75 |
| 4100 | Various streets (treat with tar)..... | 351.32 |
| 4101 | Fourteenth street extended between Monroe and Colorado avenues..... | 385.37 |
| 4108 | Thirteenth street n.w., Columbia road to Park road..... | 284.30 |
| 4115 | Champlain avenue between Florida avenue and Columbia road..... | 302.00 |
| 4116 | Eighteenth street between Park road and Newton street..... | 398.91 |
| 4117 | Newton street n.w. west of Eighteenth street..... | 113.85 |
| 4124 | Irving street east of Brightwood avenue..... | 117.56 |
| 4152 | Intersection of Soldiers' Home road and New Hampshire avenue..... | 105.56 |
| 4207 | Massachusetts avenue n.w. (prepare for oil)..... | 84.77 |
| 4209 | Massachusetts avenue and Irving street (treat with oil)..... | 919.24 |
| | | 20,018.13 |
| | Dangerous holes and minor repairs..... | 15,197.58 |
| | | 35,215.71 |

Repairs to county roads, appropriation 1908—Continued.

| Job No. | Location. | Cost. |
|--|---|-----------|
| SECTION 3. | | |
| 4009 | Rhode Island avenue and U street nw., North Capitol street to Lincoln road..... | \$108.37 |
| 4017 | Baltimore and Ohio R. R. crossing of Rhode Island avenue ne..... | 1,873.47 |
| 4018 | Todd place..... | 300.12 |
| 4022 | Seaton place nw. between First and Second streets..... | 196.62 |
| 4041 | Brentwood road ne. between Eighteenth and Twentieth streets..... | 189.90 |
| 4043 | Queens Chapel road north of Bunker Hill road..... | 765.98 |
| 4049 | Brentwood road from Twentieth street westward and Quincy street from Bunker Hill road to Thirteenth street..... | 386.00 |
| 4050 | South side Quincy street between Twelfth and Thirteenth streets..... | 786.94 |
| 4080 | Sargent road from Bunker Hill road north..... | 773.47 |
| 4125 | Rhode Island avenue ne. west of Lincoln road..... | 238.25 |
| 4153 | Lincoln road between Keating and T streets..... | 448.15 |
| 4176 | Adams street between First and North Capitol streets..... | 109.25 |
| 4186 | Keating avenue ne. east of First street..... | 41.00 |
| 4211 | Eastern avenue south of Sheriff road and Sheriff road near District line..... | 55.75 |
| Dangerous holes and minor repairs..... | | 6,333.27 |
| | | 9,387.49 |
| | | 15,720.76 |
| SECTION 4. | | |
| 4006 | Pennsylvania avenue extended, Branch avenue to Bowen road..... | 121.12 |
| 4014 | Giesboro road..... | 304.45 |
| 4015 | Livingston road between Oxen Run and District line..... | 1,011.00 |
| 4044 | Washington street between Taylor and Fendall streets..... | 699.77 |
| 4069 | Eastern avenue and adjacent roads..... | 160.65 |
| 4072 | Jackson street between Fendall and Avalon streets..... | 270.75 |
| 4185 | Ridge road..... | 193.63 |
| 4212 | Bennings road between District line and end of macadam..... | 321.12 |
| 4227 | Nichols avenue between Livingston and Good Hope roads..... | 17.25 |
| Dangerous holes and minor repairs..... | | 3,099.74 |
| | | 12,811.84 |
| | | 15,911.58 |

RECAPITULATION.

| | |
|---|-------------|
| Section 1..... | \$37,388.27 |
| Section 2..... | 35,215.71 |
| Section 3..... | 15,720.76 |
| Section 4..... | 15,911.58 |
| Total..... | 104,236.32 |
| Miscellaneous labor..... | 165.14 |
| Blacksmithing..... | 347.60 |
| Purchase and repair of tools..... | 400.19 |
| Stone breaking..... | 60.15 |
| Stone and hauling..... | 638.01 |
| Sprinkling wagons..... | 873.60 |
| Tarvia..... | 248.50 |
| Crude oil..... | 342.55 |
| Indian refined oil..... | 834.48 |
| Petroleum..... | 342.34 |
| Oil barrels..... | 151.25 |
| Material purchased for general use..... | 1,317.89 |
| Balance..... | 41.98 |
| Total..... | 110,000.00 |

REPORT OF THE ENGINEER OF BRIDGES.

WASHINGTON, D. C., September 30, 1908.

SIR: I have the honor to submit the following report for the fiscal year ended June 30, 1908:

The expenditures under the construction and repair of bridges are as follows:

Expenditures, construction, and repairs to bridges, appropriation 1908.

| Bridge No. | Character of work. | Cost. |
|------------|---|-----------|
| 35 | New floor..... | \$320.74 |
| 36 | Paint..... | 13.00 |
| 7 | Labor and part of lumber (balance of lumber was purchased last year)..... | 1,901.43 |
| 1 | New floor..... | 3,567.96 |
| 39 | do..... | 391.52 |
| 20 | do..... | 817.83 |
| 34 | Minor repairs..... | 56.00 |
| 225 | Bridge construction..... | 2,506.69 |
| 30 | Steel struts, exclusive of labor..... | 305.00 |
| | Piney Branch on the line of Sixteenth street, bushhammering parapets..... | 291.24 |
| | New culvert on the line of Rittenhouse street..... | 778.13 |
| 49 | Lumber for new floor..... | 206.26 |
| 34 | do..... | 547.98 |
| 82 | do..... | 248.16 |
| 54 | do..... | 3,834.92 |
| | Minor repairs to various culverts and bridges..... | 2,849.29 |
| | Three inspection trips..... | 130.49 |
| | Salaries and transportation..... | 1,374.50 |
| | Miscellaneous supplies and labor..... | 1,265.51 |
| | Unexpended balance..... | 87.86 |
| | Total..... | 21,494.51 |

Job numbers for the above are practically continuous from No. 3501 to No. 3534.

| | |
|---|-------------|
| Amount appropriated..... | \$20,000.00 |
| Repayment from the Capital Traction Company..... | 1,389.05 |
| Repayment from the Washington Railway and Electric Company..... | 105.46 |
| Total..... | 21,494.51 |

The Connecticut Avenue Bridge will be completed by October 15, 1908. It has been open for travel since the first of the year, but the lions on the newels at the two approaches have not yet been placed. These lions will cost \$1,000 each, exclusive of the fee paid the sculptor, Mr. R. Hinton Perry. The total appropriation for this bridge was \$850,000. The unexpended balance is \$203.98. An additional appropriation of \$2,500 is recommended to replace the macadamized portion of the sidewalks with concrete ones, at an estimated cost of \$2,500. Permanent walks could not be placed upon this portion of the bridge at the time of the bridge construction, because at that time the fill had not settled.

Your attention is invited to the necessity of modifying the existing lay-out of streets immediately adjacent to the Connecticut Avenue Bridge, in accordance with the plan approved by the Engineer Commissioner, District of Columbia, so as to afford permanent protection against the unsightly construction of buildings near the bridge. The two houses which have been recently built at the north approach are, I believe, of sufficient evidence to show that if prompt action is not taken to protect this expensive structure from the encroachment of houses, almost the entire esthetic value of the bridge will be lost, and the large sum of money expended will fail to beautify this section of the city to an extent commensurate with the expenditure.

An appropriation of \$4,000 was made last Congress for the purpose of making a report upon the improvement of the valley of Rock Creek from Massachusetts avenue to the mouth of Rock Creek. Plans for this improvement and report were drawn in the office of the engineer of bridges, leaving a balance of \$24 in the appropriation.

I have to quote as follows from this report:

"I would suggest that an appropriation of \$2,000,000 be asked for, so that the necessary land may be purchased at an early date. This appropriation of \$2,000,000 should include the necessary authority for the making of detail surveys and working drawings for the complete project. After the land is purchased and the contract plans

made I would suggest an annual appropriation of \$1,000,000 to complete the work, which would take six years, including the time necessary to purchase the right of way." (The open-valley treatment was recommended and approved by the Engineer Commissioner, District of Columbia, at an estimated cost of \$4,700,000.)

Quoting again from this report, I have to state:

"It is recommended that the improvement of Rock Creek from Massachusetts avenue to L street be executed as early as possible, as the existing conditions are unsightly, insanitary, retard the proper development of the abutting sections, and are a reflection upon the entire city of Washington. The improvement of the lower section need not be executed until there is an actual demand for a park connection between the Zoological and Potomac parks. Delay in carrying out this lower project will not add anything to its cost, whereas delay in the upper section will not only add materially to the final cost, but such delay will interfere with the proper execution of the plans. The improvement of the section between L street and Pennsylvania avenue can not be effectively executed piecemeal. The money should be appropriated to purchase all the land necessary, and the work should then proceed systematically for the attainment of the completed project. A cursory study of the building construction in the vicinity of the proposed park will show at once the necessity for fixing, as soon as possible, the final location of the streets in this vicinity."

In connection with the improvement of this portion of Rock Creek, I have to invite your attention to the desirability of constructing the Q Street Bridge at an early date. The estimated cost of this bridge is \$179,000. It should not, however, be constructed until such time as Congress has definitely approved the open-valley plans, and the necessary land on the line of this bridge and 100 feet either side of it has been acquired by the District of Columbia. It would be further advisable to grade the abutting ground in accordance with the plans before actual construction of this bridge is commenced.

The Monroe Street Bridge across the tracks of the Metropolitan branch of the Baltimore and Ohio Railroad Company, Brookland, D. C., is complete, excepting the lamps, and a balance of \$160.85 remains out of the appropriation of \$44,000. The lamps will be erected by October 15, 1908.

The Anacostia Bridge and approaches have been completed, excepting the pavement and such minor appurtenances as fences and lamps. It is thought that the bridge will be open for travel before January 1, 1909. The balance in the bridge appropriation is \$6,500. The balance in the approaches appropriation is \$24,000. The necessary land for the extension of Monroe street, incidental to the completion of the approaches, has been acquired in accordance with law.

An appropriation of \$10,000 is asked for the removal of the old bridge. It is thought that the superstructure may be sold for about \$3,500, but this is a matter of belief rather than fact. I think an appropriation of \$10,000 should be asked so that there may be no question as to the removal of this entire structure at the proper time.

January 1, 1909, any existing balance in the bridge or approach appropriations will be turned into the Treasury and will not be available for expenditure. As the south approach has not reached its final settlement it is thought advisable that any money unexpended January 1, 1909, should be reappropriated.

Out of the appropriation for the maintenance and operation of the new Anacostia Bridge it has been necessary to expend the sum of \$1,602.96, leaving a balance (out of an appropriation of \$2,800) of \$1,219. This expenditure was necessary in order to open and close the draw (prior to the actual opening of the bridge for travel), for safety to the structure itself, to keep the machinery in good condition, and to permit the hauling of the material for the south approach fill across the new bridge. An appropriation of \$7,000 should be made for the year ending 1910 for the "Maintenance and operation of the Anacostia Bridge."

It is recommended that an appropriation of \$85,000 be asked for the widening of the Piney Branch Bridge on the line of Sixteenth street to its full width, as contemplated in the original plans.

Attention is invited to the desirability of opening up New York avenue east of the new bridge across the tracks of the Terminal Company. It is thought that condemnation proceedings should be instituted as soon as possible, in order to develop the section of the city east of this bridge.

The new T Street Bridge is also practically complete, and it appears that the improvement of the streets east of this new structure might also be worthy of consideration at this time.

The elimination of the grade crossing on Cedar street at its intersection with the tracks of the Metropolitan branch of the Baltimore and Ohio Railroad is recommended, at an estimated cost of \$50,000. This is a very important crossing and it is thought that this menace to the public should be eliminated at an early date.

An appropriation of \$20,000 is necessary for the construction and repair of bridges. The amount is the same as last year.

All existing bridges are in good condition, with the exception of the old Anacostia Bridge, which will be superseded by the new structure some time before January 1, 1909.

Very respectfully,

The ENGINEER OF HIGHWAYS.

W. J. DOUGLAS,
Engineer of Bridges.

SURFACE DIVISION.

Statement showing number of employees temporarily required in connection with street, road, and bridge construction and repairs, and appropriations and deposits from which paid, during the fiscal year ended June 30, 1908.

| Designation. | Number. | Rate per diem. |
|--------------------------|---------|--|
| Assistant engineers..... | 3 | 1 at \$4.50 and 2 at \$6.00. |
| Bridge keeper..... | 1 | \$2.50. |
| Copyists..... | 2 | 1 at \$2.80 and 1 at \$3.25. |
| Draftsmen..... | 3 | 1 at \$2.50, 1 at \$4.00, and 1 at \$5.00. |
| Electrician..... | 1 | \$3.00. |
| Inspectors..... | 29 | 1 at \$3.00, 1 at \$3.50, 16 at \$4.00, 2 at \$4.50, 4 at \$5.00, 1 at \$7.00, and 4 at \$1.00 per hour. |
| Overseers..... | 6 | 3 at \$2.25, 1 at \$2.50, and 2 at \$4.00. |
| Plumbers..... | 5 | \$4.00. |
| Rodman..... | 1 | \$3.00. |
| Transitmen..... | 5 | 2 at \$3.00, 1 at \$3.50, and 2 at \$4.00. |

Appropriations from which paid.

| | |
|--|------------|
| Improvements and repairs, District of Columbia, 1908..... | \$9,026.36 |
| Monroe Street Bridge, Brookland, D. C..... | 4,196.00 |
| Plans for treatment of valley of Rock Creek, District of Columbia..... | 3,047.50 |
| Bridge across Anacostia River, District of Columbia..... | 558.00 |
| Approaches, etc., Anacostia Bridge, District of Columbia, grading, improving, etc..... | 1,979.50 |
| Maintenance of bridge across Anacostia River, District of Columbia..... | 388.00 |
| Connecticut Avenue Bridge across Rock Creek, District of Columbia, paving approaches..... | 427.50 |
| Connecticut Avenue Bridge across Rock Creek, District of Columbia..... | 251.00 |
| K Street Bridge across Rock Creek, District of Columbia..... | 101.00 |
| Elimination of grade crossings, District of Columbia, purchase, etc., of land, grading, etc..... | 12,072.00 |
| Electrical department, District of Columbia: | |
| Moving fire-alarm apparatus..... | \$52.00 |
| Wires underground..... | 32.00 |
| | 84.00 |
| Total..... | 32,130.86 |

TABLE A.—Street railroads in operation in the District of Columbia July 1, 1908.

| Name of company. | Tracks in use owned by company. | | | |
|---|---------------------------------|---------------|--------------------|---------------|
| | Underground electric. | | Overhead electric. | |
| | Double. | Single. | Double. | Single. |
| Washington Railway and Electric Co.: | <i>Miles.</i> | <i>Miles.</i> | <i>Miles.</i> | <i>Miles.</i> |
| Metropolitan R. R. | 9.37 | 3.98 | | |
| Columbia Ry. | 2.77 | | 4.12 | 0.89 |
| City and Suburban Ry. of Washington. | 4.06 | 2.36 | 5.58 | |
| Brightwood Ry. | | | 5.93 | |
| Georgetown and Tennallytown Ry. | | | 4.16 | |
| Anacostia and Potomac River R. R. | 7.35 | | 1.46 | 1.64 |
| Washington and Great Falls Electric Ry. | | | 3.88 | |
| Washington and Glen Echo R. R. | | | .10 | |
| Capital Traction. | 15.29 | 3.26 | 3.57 | |
| Baltimore and Washington Transit. | | | | |
| Washington, Alexandria and Mount Vernon Electric Ry. | .90 | .33 | | |
| Total. | 39.74 | 9.93 | 28.80 | 2.53 |

TABLES B AND C.—Statement of character and extent of street pavements June 30, 1908.

| Section. | Asphalt and coal tar. | | Asphalt block. | | Vitrified block. | | Granite. | |
|------------------|-----------------------|--------|----------------|--------|------------------|--------|---------------|--------|
| | Square yards. | Miles. | Square yards. | Miles. | Square yards. | Miles. | Square yards. | Miles. |
| Northwest. | 1,793,362 | 82.59 | 33,609 | 1.97 | 18,630 | 0.68 | 135,426 | 6.92 |
| Northeast. | 275,960 | 14.14 | 205,449 | 9.00 | | | 13,567 | .89 |
| Southeast. | 161,079 | 9.35 | 222,078 | 10.56 | | | 49,940 | 2.55 |
| Southwest. | 188,992 | 10.17 | 51,990 | 2.64 | 3,005 | .20 | 189,404 | 10.09 |
| Georgetown. | 132,890 | 8.09 | 14,837 | .65 | 780 | .04 | 54,198 | 3.27 |
| Suburban. | 316,323 | 17.49 | 55,767 | 3.14 | | | 31,713 | 1.70 |
| Total. | 2,868,606 | 141.63 | 559,609 | 27.96 | 22,415 | 92 | 474,248 | 25.42 |

| Section. | Cobble. | | Macadam. | | Gravel and unimproved. | | Total. | |
|------------------|---------------|--------|---------------|--------|------------------------|--------|---------------|--------|
| | Square yards. | Miles. | Square yards. | Miles. | Square yards. | Miles. | Square yards. | Miles. |
| Northwest. | 66,867 | 2.83 | 47,645 | 2.97 | 58,571 | 3.10 | 2,154,110 | 101.06 |
| Northeast. | | | 66,958 | 4.01 | 220,000 | 12.00 | 781,934 | 40.04 |
| Southeast. | 12,641 | .54 | 62,735 | 3.50 | 275,000 | 15.00 | 783,473 | 41.50 |
| Southwest. | 72,838 | 3.08 | 32,472 | 1.60 | 128,000 | 7.75 | 666,701 | 35.53 |
| Georgetown. | 13,010 | .75 | 14,904 | .94 | 24,301 | 1.42 | 254,920 | 15.16 |
| Suburban. | | | 1,086,019 | 70.09 | 1,400,000 | 125.00 | 2,889,822 | 217.42 |
| Total. | 165,356 | 7.20 | 1,310,733 | 83.11 | 2,105,872 | 164.27 | 7,530,960 | 450.71 |

TABLE G.—Work of paving and repairs to asphalt pavements chargeable to street railroads for year ending June 30, 1908.

WASHINGTON RAILWAY AND ELECTRIC COMPANY.

| Location. | Amount. | Location. | Amount. |
|--|----------|-------------------------------------|------------|
| NEW WORK AND GENERAL RESURFACING | | MINOR REPAIRS—continued. | |
| Canal street, B to D sw..... | \$477.12 | H nw..... | \$1,794.64 |
| E street, South Capitol to First se..... | 673.00 | H ne..... | 1,736.97 |
| D street, Tenth to Eleventh sw..... | 21.43 | Indiana avenue..... | 70.70 |
| D street, Eleventh to Twelfth sw..... | 16.69 | K nw..... | 196.66 |
| Maryland avenue, Ninth to Eleventh sw..... | 23.03 | M nw..... | 159.56 |
| Maryland avenue, Eleventh to Twelfth sw..... | 17.31 | Maryland avenue sw..... | 4.14 |
| L street, North Capitol to New Jersey avenue nw..... | 18.98 | Massachusetts avenue nw..... | 807.86 |
| North Capitol, K to Pierce nw..... | 393.65 | Missouri avenue..... | 401.65 |
| Pennsylvania avenue, Sixth to Fifteenth nw..... | 2,207.43 | Monroe street, Anacostia..... | 81.28 |
| Ninth street, E to G se..... | 49.37 | North Capitol..... | 1,954.79 |
| Eleventh street, Columbia road to Irving nw..... | 141.29 | New Jersey avenue..... | 69.43 |
| Total..... | 4,039.30 | New York avenue..... | 1,582.08 |
| MINOR REPAIRS. | | P street nw..... | 228.31 |
| B street nw..... | 673.17 | Prospect street..... | 90.48 |
| B street ne..... | 3.45 | T ne..... | 2.76 |
| B street sw..... | 197.64 | U nw..... | 2.76 |
| Benning road se..... | 4.14 | First nw..... | 95.76 |
| C ne and nw..... | 314.51 | First ne..... | 9.69 |
| Canal sw..... | 211.14 | Second ne..... | 15.50 |
| Columbia road nw..... | 735.29 | Third ne..... | 27.66 |
| Connecticut avenue nw..... | 446.63 | Third nw..... | 33.44 |
| D nw..... | 241.87 | Fourth nw..... | 137.96 |
| D ne..... | 19.39 | Four-and-a-half sw..... | 1,312.98 |
| Dumbarton..... | 173.10 | Fifth nw..... | 117.43 |
| E nw..... | 785.83 | Sixth nw..... | 57.31 |
| E se..... | 183.10 | Ninth nw..... | 2,444.49 |
| East Capitol..... | 221.85 | Eleventh nw..... | 1,972.72 |
| F nw..... | 507.47 | Thirteenth ne..... | 60.85 |
| Florida avenue..... | 30.16 | Fourteenth nw..... | 721.33 |
| G nw..... | 1,602.02 | Fourteenth ne..... | 4.83 |
| G se..... | 11.52 | Seventeenth nw..... | 42.35 |
| | | Twenty-eighth nw..... | 71.91 |
| | | Thirty-fifth nw..... | 82.80 |
| | | Thirty-sixth nw..... | 193.69 |
| | | Total minor repairs..... | 22,949.05 |
| | | Total new work and resurfacing..... | 4,039.30 |
| | | | 26,988.35 |

CAPITAL TRACTION COMPANY.

| | | | |
|--|------------|-------------------------------------|----------|
| NEW WORK AND GENERAL RESURFACING. | | MINOR REPAIRS—continued. | |
| Pennsylvania avenue, Sixth to Fifteenth..... | \$1,645.31 | Pennsylvania avenue nw..... | \$67.31 |
| Pennsylvania avenue, Seventeenth to Eighteenth..... | 195.53 | Pennsylvania avenue se..... | .69 |
| Seventh street, Pennsylvania avenue to Market space..... | 52.98 | U street nw..... | 41.53 |
| Fourteenth street, Thomas circle to Rhode Island avenue..... | 173.13 | First street nw..... | 30.16 |
| Total..... | 2,066.95 | Seventh street nw..... | 99.22 |
| MINOR REPAIRS. | | Fourteenth street nw..... | \$376.53 |
| F street nw..... | 5.52 | Fifteenth street nw..... | 594.99 |
| M street nw..... | 478.19 | Seventeenth street nw..... | 14.93 |
| New York avenue..... | 13.80 | Eighteenth street nw..... | .69 |
| | | Twenty-fifth street nw..... | 27.67 |
| | | Twenty-sixth street nw..... | 254.61 |
| | | Total minor repairs..... | 2,005.84 |
| | | Total new work and resurfacing..... | 2,066.95 |
| | | | 4,072.79 |

WASHINGTON, ALEXANDRIA AND MOUNT VERNON RAILROAD.

| Location. | Amount. |
|------------------------------------|----------|
| MINOR REPAIRS. | |
| Fourteenth street nw..... | \$202.93 |
| Intersection Thirteenth and D..... | 8.97 |
| Total minor repairs..... | 211.90 |

B.—Elimination of grade crossings.

| Contract work. | | | | | | | Material. | | | | Cost of material. | Extra work and day labor. | Amount of contract work. |
|-------------------|-------------------|-----------------------|---------------------|---------------------|---------------------|--------------------------|-------------------|----------------------------|-----------------------------|---------------------|-------------------|---------------------------|--------------------------|
| Macadam grading. | Overhaul. | Old pavement removed. | Old curb removed. | Curb reset. | Curb set. | Vitrified block gutters. | Number of blocks. | 8 by 8 inch straight curb. | 6 by 20 inch straight curb. | Circular curb. | | | |
| <i>Cu. yards.</i> | <i>Cu. yards.</i> | <i>Sq. yards.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Sq. yards.</i> | | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | | | |
| | | 2,637.50 | | | | 240.85 | 10,850 | | | | \$226.72 | | \$3,577.73 |
| | | 31.50 | | | | 165.87 | 7,290 | | | | 152.36 | | 2,368.36 |
| | 574.51 | 252.70 | | | 307.92 | 489.17 | | | 471.24 | 25.12 | 751.52 | | 4,725.59 |
| | | 1,156.00 | | | 796.08 | 108.68 | 8,993 | | 110.49 | | 328.58 | \$5.39 | 3,941.25 |
| | | 2,608.00 | | | 1,182.74 | 47.10 | 25,119 | | 47.10 | | 588.58 | 491.91 | 7,297.44 |
| | | | 46.00 | 3.00 | | 219.46 | 12,282 | | | | 127.12 | | 3,444.56 |
| | | 3,167.00 | | 1,058.65 | | 271.49 | 13,800 | | | | 288.42 | 42.26 | 5,731.39 |
| | 570.00 | 27.50 | | 254.83 | | 401.00 | 17,773 | | | | 371.46 | 883.43 | 5,085.51 |
| | 240.00 | 250.00 | | 40.00 | | 515.93 | 23,525 | | | | 491.67 | | 6,690.92 |
| | | | | 154.55 | | 225.06 | 10,709 | | | | 223.82 | | 2,652.57 |
| | 555.00 | 484.00 | 11.49 | 254.95 | | 351.74 | 16,150 | | | | 352.12 | 1,717.60 | 5,080.33 |
| 450.00 | 550.00 | 170.00 | 210.00 | 48.09 | 469.73 | 149.21 | 7,007 | | | 29.35 | 183.48 | 889.77 | 2,296.71 |
| 100.00 | 400.00 | 231.00 | 728.00 | 21.00 | | 152.84 | 11,918 | | | | 249.07 | | 3,879.15 |
| | | | | 35.00 | | 315.41 | 19,310 | | | | 199.56 | 1,642.15 | 5,640.31 |
| | | | | 21.00 | | 87.17 | 5,400 | | | | 55.99 | | 1,467.09 |
| 100.00 | 316.00 | 9.58 | | 271.62 | 10.30 | 80.16 | 4,675 | | | 10.60 | 108.95 | | 1,908.65 |
| | | | | 57.00 | | 16.00 | 160 | | | | 3.52 | | 373.68 |
| | 942.00 | 2,690.00 | 90.00 | 108.91 | | 343.98 | 15,174 | | | | 324.64 | 62.80 | 5,867.30 |
| | 190.00 | | | 9.42 | | 218.49 | 10,050 | | | | 209.04 | | 2,466.04 |
| | 324.00 | 1,610.00 | 48.00 | 787.87 | 78.13 | 171.51 | 10,145 | | | | 116.82 | 18.24 | 3,644.05 |
| 9.6 | | | 53.01 | 82.75 | 48.50 | 122.95 | 5,246 | | 30.16 | 18.84 | 166.74 | 293.63 | 1,828.72 |
| 6 | | | | | | | | | | | | 514.01 | 4,380.66 |
| 8 | | | | | | | | | | | | | |
| 53.00 | 4,671.51 | 15,318.78 | 1,186.49 | 5,495.38 | 1,251.61 | 5,055.41 | 235,506 | | 658.99 | 83.91 | 5,520.18 | 6,561.19 | 84,366.00 |
| 09 | | | | | | | | | | | | | |

^b Order of Commissioners.

Increment since last report.

E.—Elimination of grade crossings.

| Contract work. | | | | | | | Material. | | | | Cost of material. | Extra work and day labor. | Amount of contract work. | Total cost of street. | Contractor. |
|-------------------|-------------------|-----------------------|---------------------|---------------------|---------------------|--------------------------|-------------------|----------------------------|-----------------------------|---------------------|-------------------|---------------------------|--------------------------|-----------------------|---|
| Macadam grading. | Overhaul. | Old pavement removed. | Old curb removed. | Curb reset. | Curb set. | Vitrified block gutters. | Number of blocks. | 8 by 8 inch straight curb. | 6 by 20 inch straight curb. | Circular curb. | | | | | |
| <i>Cu. yards.</i> | <i>Cu. yards.</i> | <i>Sq. yards.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Sq. yards.</i> | | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | | | | | |
| | | 2,637.50 | | | | 240.85 | 10,850 | | | | \$226.72 | | \$3,577.73 | \$3,804.45 | Cranford Paving Co. |
| | | 31.50 | | | | 165.87 | 7,290 | | | | 152.36 | | 2,368.36 | 2,520.72 | Do. |
| | 574.51 | 252.70 | | | 307.92 | 275.54 | | | 471.24 | 25.12 | 751.52 | | 4,725.59 | 5,477.11 | Do. |
| | | 1,156.00 | | | 796.08 | 108.68 | 8,993 | | 110.49 | | 328.58 | \$5.39 | 3,941.25 | 4,275.22 | Do. |
| | | 2,608.00 | | | 1,182.74 | 47.10 | 25,119 | | 47.10 | | 588.58 | 491.91 | 7,297.44 | 8,377.93 | Do. |
| | | | 46.00 | | 3.00 | | 12,282 | | | | 127.12 | | 3,444.56 | 3,571.68 | Brennan Construction Co. |
| | | 3,167.00 | | | 1,058.65 | | 13,800 | | | | 288.42 | 42.26 | 5,731.39 | 6,062.07 | Cranford Paving Co. |
| | 570.00 | 27.50 | | | 254.83 | | 17,773 | | | | 371.46 | 883.43 | 5,065.51 | 6,340.46 | Do. |
| | 240.00 | 250.00 | | | 40.00 | | 23,525 | | | | 491.67 | | 6,090.92 | 7,182.56 | Brennan Construction Co. |
| | | | | | 154.55 | | 10,709 | | | | 223.82 | | 2,652.57 | 2,876.36 | Cranford Paving Co. |
| | 565.00 | 484.00 | 11.49 | | 254.95 | 351.74 | 16,150 | | | | 352.12 | 1,717.60 | 5,089.33 | 7,159.05 | Do. |
| 450.00 | 550.00 | 170.00 | 210.00 | | 48.09 | 469.73 | 7,007 | | | 29.35 | 183.48 | 889.77 | 2,296.71 | 3,369.96 | Do. |
| 100.00 | 400.00 | 231.00 | 728.00 | | 21.00 | | 11,918 | | | | 249.07 | | 3,879.15 | 4,128.22 | Brennan Construction Co. |
| | | | | | 35.00 | | 19,310 | | | | 199.56 | 1,642.15 | 5,649.31 | 7,491.02 | Do. |
| | | | | | 21.00 | | 5,400 | | | | 55.99 | | 1,467.09 | 1,523.08 | Do. |
| 100.00 | 316.00 | 9.58 | | | 271.62 | 10.30 | 80.16 | 4,675 | | 10.60 | 108.95 | | 1,908.65 | 2,017.60 | Do. |
| | | | | | 57.00 | | 16.00 | | | | 3.52 | | 373.68 | 377.20 | Cranford Paving Co. |
| | 942.00 | 2,690.00 | 90.00 | | 108.91 | | 343.98 | 15,174 | | | 324.64 | 62.80 | 5,867.30 | 6,254.74 | Do. |
| | 190.00 | | | | 9.42 | | 218.49 | 10,050 | | | 209.04 | | 2,466.04 | 2,675.08 | Do. |
| | 324.00 | 1,610.00 | 48.00 | | 787.87 | 78.13 | 171.51 | 10,145 | | | 116.82 | 18.24 | 3,644.05 | 3,779.11 | Do. |
| | | | 53.01 | | 82.75 | 48.50 | 122.95 | 5,246 | | 30.16 | 166.74 | 238.63 | 1,828.72 | 2,289.00 | Do. |
| | | | | | | | | | | | | 514.01 | 4,380.66 | 4,894.67 | Do. |
| | | | | | | | | | | | | | | 788.80 | Philadelphia, Baltimore and Washington R.R. Co. |
| | | | | | | | | | | | | | | 31,583.13 | McMullin, McDermott & Hoffman. |
| 0.00 | 4,671.51 | 15,318.78 | 1,186.49 | 5,495.38 | 1,251.61 | 5,055.41 | 235,506 | | 658.99 | 83.91 | 5,520.18 | 6,561.19 | 84,366.00 | 128,819.31 | |

^a Order of Commissioners.

^b Increment since last report.

oads

amt.

794.64
736.97
70.70
96.66
59.56
4.14
07.86
01.65
81.28
54.79
69.43
82.08
28.31
30.48
2.76
2.76
95.76
9.69
15.50
27.66
33.44
37.96
112.98
17.43
57.31
144.49
372.72
60.85
721.33
4.83
42.35
71.91
82.80
193.69
949.05
339.30
988.35

\$67.31
.69
41.53
30.16
99.22
\$376.53
594.99
14.93
.69
27.67
254.61
2,005.84
2,066.95
1,072.79

ount.

\$202.93
8.97
211.90

roads and suburban streets for year ending June 30, 1908.

AND AVENUES.

| work. | Material. | | | | | | | |
|----------|---------------------------------|-------------------|-------------|------------|-------------------------------|------------------|---------------|----------------|
| haul. | Old cobble and granite removed. | Old curb removed. | Curb reset. | Curb set. | Vitrified and cobble gutters. | Vitrified block. | 8' x 8' curb. | 6" x 20" curb. |
| | Square yds. | Linear ft. | Linear ft. | Linear ft. | Square yds. | Number. | Linear ft. | Linear ft. |
| bie yds. | 350.00 | 210.00 | 1,507.05 | 617.50 | 440.80 | 18,300 | 619.30 | |
| 005.1 | 43.00 | | 285.10 | 617.50 | 440.80 | 18,300 | 619.30 | |
| 590.00 | 843.00 | 629.00 | 1,266.41 | 13.85 | 280.37 | 15,063 | 118.95 | |
| | | | 956.55 | 18.84 | 225.64 | 9,820 | | |
| | 635.00 | 1,210.00 | 233.65 | 1,202.46 | 2,606.15 | | 1,184.87 | |
| | 597.75 | 1,517.00 | 716.12 | 4,679.06 | 104.41 | 5,000 | 2,674.98 | |
| | 10.00 | 70.00 | 7.05 | 287.09 | 80.34 | 3,375 | 245.00 | |
| | | | 35.00 | | 257.83 | 12,839 | | |
| | 380.00 | 43.00 | 855.78 | | | | | |
| 620.00 | 408.00 | 1,073.50 | 151.43 | 1,344.75 | 330.49 | 15,100 | 1,150.00 | |
| 660.00 | 871.00 | 2,021.00 | 233.12 | 1,735.14 | | | 1,702.46 | |
| 620.00 | 429.00 | 182.00 | 376.56 | 181.88 | | | 150.00 | |
| 153.11 | 13.00 | 59.50 | 489.63 | 27.42 | | | | |
| | 67.11 | | 213.47 | 206.82 | 2.62 | 150 | 196.85 | |
| | 2,386.45 | | 1,404.04 | 408.10 | | | | |
| 876.00 | 1,755.00 | 847.00 | 3,369.46 | 856.99 | | | | |
| | | 1,015.00 | 163.16 | 1,050.66 | | | 961.12 | |
| 284.00 | 284.00 | 249.00 | 437.23 | 251.92 | | | | |
| | | | | | | | | |
| 341.00 | 533.00 | 700.00 | 67.05 | 990.38 | | | | |
| | | | | | | | | |
| 099.20 | 9,215.31 | 9,005.50 | 12,787.86 | 16,639.01 | 1,722.50 | 79,647 | 8,068.43 | 935.10 |

AND SUBURBAN STREETS.

| | | | | | | | | |
|--------|----------|----------|----------|------------|----------|--------|-----------|----------|
| 925.00 | | | | | 690.50 | | | |
| 015.00 | | | 19.55 | 235.85 | 101.30 | 3,870 | 190.12 | |
| | 432.50 | | 846.71 | 70.05 | 341.54 | 14,665 | 70.02 | |
| 588.92 | 49.44 | 89.22 | 24.37 | 534.97 | | | | |
| | | | | 1,428.08 | 574.70 | 32,300 | 1,400.95 | |
| 590.00 | 278.00 | 1,792.00 | | 2,058.13 | 1,005.70 | | 1,703.75 | |
| 097.00 | 350.00 | | 70.00 | 1,400.76 | | | 1,394.19 | |
| | | | | 1,645.33 | 9.22 | 410 | 1,522.94 | |
| 446.00 | 456.11 | | | 8.95 | 400 | | | |
| 808.39 | 612.00 | | 325.90 | | | | | |
| | | | | | | | | |
| 625.00 | 597.58 | 787.87 | 3.92 | 862.19 | 6.83 | 320 | 765.02 | |
| | | | | | | | | |
| 353.00 | | | 29.00 | 710.00 | 7.50 | | 321.10 | |
| 487.00 | 158.99 | | 275.77 | 386.00 | 7.00 | 308 | 305.61 | |
| 105.00 | 334.63 | | 18.40 | 319.05 | | | 2,619.97 | |
| | 205.40 | 272.60 | 27.68 | 2,841.31 | 1,341.00 | | | |
| | | | | 986.00 | 427.00 | | 915.10 | |
| | | | | | | | | |
| | | | | c 1,049.54 | | | | |
| | | | | d 4,181.70 | | | | |
| 540.84 | 3,854.65 | 2,946.69 | 1,641.30 | 10,277.72 | 5,231.24 | 52,273 | 10,489.46 | 1,464.21 |

c Vitrified brick gutters.

| Circular curb. | Cost of material. | Cost of extra work and day labor. | Amount of contract work. | Total cost of street. |
|----------------|-------------------|-----------------------------------|--------------------------|-----------------------|
| | | | \$5,158.49 | \$5,158.49 |
| | \$1,064.64 | | 4,397.41 | 5,402.05 |
| | | | 5,253.09 | 5,745.06 |
| | 216.04 | | 3,121.91 | 3,337.95 |
| | 1,004.96 | | 4,679.38 | 5,684.34 |
| | | | 3,212.62 | 3,212.62 |
| 1,094.01 | 3,524.13 | \$630.55 | 21,883.59 | 26,038.27 |
| 47.84 | 327.04 | | 649.18 | 976.22 |
| | | | 5,071.02 | 5,339.36 |
| | 268.34 | | 2,897.43 | 2,897.43 |
| | | | 5,614.79 | 6,959.62 |
| 59.66 | 1,344.83 | | 6,886.45 | 8,336.45 |
| 18.80 | 1,450.00 | | 2,662.39 | 2,812.11 |
| 21.98 | 149.72 | | 2,544.22 | 504.33 |
| | | | 51.24 | 209.83 |
| | | | 12.56 | 16.96 |
| | | | 14.42 | 19.47 |
| | | | 66.03 | 877.97 |
| | | | 9.42 | 12.72 |
| | | | 50.00 | 842.78 |
| | | | 50.31 | 3,425.78 |
| | | | 680.86 | |
| 1,395.32 | 11,821.40 | | 106,521.21 | 119,023.47 |

| | | | | |
|--------|------------|------------|------------|------------|
| | \$1,514.10 | \$2,137.12 | \$6,338.20 | \$9,980.42 |
| | | 475.44 | 1,524.56 | 2,000.00 |
| | 1,074.77 | 1,687.07 | 1,236.16 | 3,998.00 |
| | 518.61 | 13.11 | 408.28 | 1,000.00 |
| 45.08 | 396.15 | 499.02 | 4,576.71 | 3,972.86 |
| | 47.45 | 1,759.47 | 1,909.80 | 2,698.39 |
| | 101.69 | 2,183.65 | 849.21 | 4,998.12 |
| | 15.70 | 396.23 | 2,814.47 | 3,994.78 |
| | | 1,548.84 | 2,392.53 | 2,999.08 |
| | | | 6,113.25 | 7,457.84 |
| | | | 7,735.55 | 7,743.91 |
| | | | 5,032.00 | 5,990.10 |
| | | | 329.84 | 1,999.24 |
| | | | 5,469.61 | 6,148.88 |
| | | | 1,307.69 | 3,065.70 |
| | | | 1,699.51 | 3,858.00 |
| | | | 545.06 | 2,336.76 |
| | | | 270.58 | 2,964.67 |
| | | | 1,326.64 | 5,000.00 |
| | | | 869.22 | 26,466.50 |
| | | | 424.98 | 2,407.71 |
| | | | 195.66 | 6,631.68 |
| | | | | 1,877.07 |
| | | | | 2,407.71 |
| 587.71 | 15,403.54 | 16,396.03 | 58,583.32 | 123,481.07 |

d Cobble gutters.

AND AVENUES.

| work. | | | | | | Material. | | |
|-----------|---------------------------------|-------------------|-------------------|-------------------|-------------------------------|------------------|-------------------|-------------------|
| per haul. | Old cobble and granite removed. | Old curb removed. | Curb reset. | Curb set. | Vitrified and cobble gutters. | Vitrified block. | 8' x 8' curb. | 6" x 20" curb. |
| | <i>Square yds.</i> | <i>Linear ft.</i> | <i>Linear ft.</i> | <i>Linear ft.</i> | <i>Square yds.</i> | <i>Number.</i> | <i>Linear ft.</i> | <i>Linear ft.</i> |
| 350.00 | 43.00 | 210.00 | 1,285.05 | 617.50 | 440.80 | 15,300 | | 619.30 |
| 605.13 | 843.00 | 629.00 | 1,266.41 | 13.85 | 280.37 | 15,063 | | 118.95 |
| 590.00 | | | 956.55 | 18.84 | 225.64 | 9,820 | | |
| | 635.00 | 1,210.00 | 233.65 | 1,202.46 | | | 1,184.87 | |
| | 557.75 | 1,517.00 | 716.12 | 2,606.15 | 104.41 | 5,000 | 2,674.98 | |
| | 10.00 | 70.00 | 7.05 | 4,679.06 | 80.34 | 3,375 | 245.00 | |
| | | | 35.00 | 287.09 | | 12,839 | | |
| | | | | | 257.83 | | | |
| 620.00 | 380.00 | 43.00 | 855.78 | | | | | |
| 660.00 | 408.00 | 1,073.50 | 151.43 | 1,344.75 | 330.49 | 15,100 | 1,150.00 | |
| 620.00 | 871.00 | 2,021.00 | 253.12 | 1,735.14 | | | 1,702.46 | |
| 153.10 | 429.00 | 182.00 | 376.56 | 181.88 | | | 150.00 | |
| | 13.00 | 59.50 | 489.63 | 27.42 | | | | |
| | 67.11 | | 213.47 | 206.82 | 2.62 | 150 | | 196.85 |
| | 2,386.45 | | 1,404.04 | 468.10 | | | | |
| 876.00 | 1,755.00 | 847.00 | 3,369.46 | 956.99 | | | | |
| | | 1,015.00 | 163.16 | 1,050.66 | | | 961.12 | |
| 284.00 | 284.00 | 249.00 | 437.23 | 251.92 | | | | |
| 341.60 | 533.00 | 700.00 | 67.05 | 990.38 | | | | |
| 099.30 | 9,215.31 | | | | 1,722.50 | 79,647 | | 935.10 |
| | | 9,005.50 | 12,787.86 | 16,639.01 | | | 8,068.43 | |

TO SUBURBAN STREETS.

[illegible]

c Vitrified brick gutters.

| Circular curb. | Cost of material. | Cost of extra work and day labor. | Amount of contract work. | Total cost of street. | Contractor. |
|-------------------|-------------------|-----------------------------------|--------------------------|-----------------------|---------------------------------------|
| <i>Linear ft.</i> | | | | | |
| | \$1,084.64 | | \$5,158.49 | \$5,158.49 | Washington Asphalt Block and Tile Co. |
| | 491.97 | | 4,397.41 | 5,462.05 | Cranford Paving Co. |
| | 216.04 | | 5,253.00 | 5,745.06 | Do. |
| | 1,004.96 | | 3,121.91 | 3,337.95 | Do. |
| | | | 4,679.38 | 5,684.34 | Washington Asphalt Block and Tile Co. |
| | | | 3,212.62 | 3,212.62 | Brennan Construction Co. |
| 1,094.01 | 3,524.13 | \$630.55 | 21,883.59 | 26,038.27 | Do. |
| 47.84 | 327.04 | | 649.18 | 976.22 | Do. |
| | | | | | |
| | 268.34 | | 5,071.02 | 5,339.36 | Cranford Paving Co. |
| | | | | | |
| | | | 2,897.43 | 2,897.43 | Washington Asphalt Block and Tile Co. |
| 59.66 | 1,344.83 | | 5,614.79 | 6,959.62 | Cranford Paving Co. |
| 18.80 | 1,450.00 | | 6,886.45 | 8,336.45 | Washington Asphalt Block and Tile Co. |
| 21.98 | 149.72 | | 2,662.39 | 2,812.11 | Do. |
| | | | 2,544.22 | 2,544.22 | Do. |
| | | | 504.33 | 504.33 | Brennan Construction Co. |
| | 209.83 | | 1,716.15 | 1,925.98 | Do. |
| 12.56 | 16.96 | | 6,486.20 | 6,503.16 | Do. |
| 14.42 | 19.47 | | 13,211.32 | 13,230.79 | Washington Asphalt Block and Tile Co. |
| 66.63 | 877.97 | | 4,283.40 | 5,161.37 | Do. |
| 9.42 | 12.72 | | 2,862.06 | 2,874.78 | Do. |
| | | | | | |
| 50.00 | 842.78 | 50.31 | 3,425.78 | 4,318.87 | Do. |
| | | | | | |
| | | 680.86 | | | |
| 1,396.32 | 11,821.40 | | 106,521.21 | 119,023.47 | |

| | | | | | |
|--------|------------|------------|------------|------------|---------------------------------------|
| | \$1,514.10 | \$2,137.12 | \$6,338.20 | \$9,989.42 | E. G. Gummel. |
| | | 475.44 | 1,524.56 | 2,000.00 | Latimer & Linney. |
| | 1,074.77 | 1,657.07 | 1,236.16 | 3,986.00 | G. B. Mullin. |
| 45.08 | 518.61 | 13.11 | 65.28 | 1,000.00 | Do. |
| | 396.15 | | 4,576.71 | 4,972.85 | Cranford Paving Co. |
| 51.24 | 409.02 | 379.57 | 1,909.80 | 2,698.39 | Washington Asphalt Block and Tile Co. |
| 17.45 | 1,027.51 | 1,759.47 | 849.21 | 3,636.19 | G. B. Mullin. |
| 101.69 | | 2,183.65 | 2,814.47 | 4,968.12 | Do. |
| 15.70 | 1,204.02 | 338.23 | 2,392.53 | 3,994.25 | Do. |
| | 1,450.24 | 1,546.84 | | 2,999.08 | Day labor. |
| 53.50 | 1,344.59 | | 6,113.25 | 7,457.84 | Brennan Construction Co. |
| | 8.36 | | 7,735.55 | 7,743.91 | Do. |
| | | 958.10 | 5,032.00 | 5,990.10 | G. B. Mullin. |
| | | 329.84 | 1,669.40 | 1,999.24 | Do. |
| 28.26 | 679.27 | | 5,469.61 | 6,148.85 | Brennan Construction Co. |
| | 1,758.01 | 1,307.69 | | 3,065.70 | Day labor. |
| | 1,699.51 | 1,607.96 | 550.53 | 3,858.00 | G. B. Mullin. |
| 8.23 | 288.18 | 545.06 | 2,536.76 | 3,370.00 | Washington Asphalt Block and Tile Co. |
| 15.80 | 279.58 | | 2,685.07 | 2,964.67 | Brennan Construction Co. |
| 178.84 | 1,326.64 | 869.22 | 2,804.14 | 5,000.00 | G. B. Mullin. |
| | | | | 26,466.50 | J. J. Overn. |
| 72.22 | 424.98 | 195.66 | 1,877.07 | 2,497.71 | G. B. Mullin. |
| | | | | 6,631.68 | E. G. Gummel. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 587.71 | 15,403.54 | 16,396.03 | 58,583.32 | 123,481.07 | |

d Cobble gutters.

TABLE E.—Work on streets and avenues and

STR

| Street. | From— | To— | Section. | Kind of pavement and nature of work. | Square yards. | Length. | No. of contract. | Price per square yard. | Ordinary grading. | Macadam grading. |
|--|------------|--------------------|--------------------------|--------------------------------------|---------------|---------|------------------|------------------------|-------------------|------------------|
| B. Bates | Thirteenth | Fourteenth | Northeast | Asphalt block | 2,468.63 | 727 | 3909 | \$1.65 | Cubic yds. 350.00 | Cubic 400 |
| Canal (north side) | First | Third | Northwest | Asphalt | 1,820.80 | 830 | 3910 | 1.69 | 305.12 | |
| E. E. | B. | D. | Southwest | do. | 2,034.90 | 1,165 | 3910 | 1.69 | 300.00 | 290 |
| E. E. | Eighteenth | Nineteenth | Northwest | do. | 1,357.24 | 450 | 3910 | 1.69 | 261.79 | |
| Florida avenue | Seventh | Maryland avenue | Northeast | Asphalt block | 2,141.02 | 598 | 3909 | 1.65 | 900.00 | |
| Connecticut Avenue Bridge approaches. | Eighteenth | Connecticut avenue | Northwest | Asphalt | 1,248.86 | 905 | 3920 | 1.68 | 141.16 | 282 |
| Pennsylvania avenue, front of Center Market. | | | do. | do. | 9,472.09 | 2,242 | 3920 | 1.08 | 8,161.88 | 792 |
| South Capitol | D. | E. | do. | do. | 227.79 | 128 | 3920 | 1.68 | 100.00 | |
| Fifth | G. | H. | Southeast and southwest. | do. | 2,485.82 | 473 | 3910 | 1.69 | 652.00 | 159.0 |
| Eight | H. | Water | Northeast | Asphalt block | 1,464.76 | 412 | 3909 | 1.65 | | 351.3 |
| Ninth | G. | K. | Southwest | Asphalt | 2,381.19 | 330 | 3910 | 1.69 | 305.00 | 315 |
| Ninth | K. | Virginia avenue | Southeast | Asphalt block | 3,239.75 | 951 | 3909 | 1.65 | 180.00 | 471 |
| Eleventh | C. | D. | do. | do. | 1,251.18 | 293 | 3909 | 1.65 | 530.00 | 90 |
| Fourteenth | Crittenden | D. | Northeast | do. | 1,367.75 | 378 | 3909 | 1.65 | 153.14 | 94 |
| Twenty-third | R. | Decatur | Northwest | Asphalt | 275.59 | 170 | 3920 | 1.68 | 91.86 | |
| Twenty-ninth | M. | Sheridan circle | do. | do. | 515.92 | 220 | 3920 | 1.68 | 189.76 | 114 |
| G. | K. | do. | Georgetown | do. | 2,362.63 | 851 | 3920 | 1.68 | 479.19 | |
| Tenth | I. | Ninth | Northeast | Asphalt block a. | 6,402.90 | 1,888 | 3782 | 1.60 | 1,038.00 | 988 |
| South Capitol | C. | L. | Southeast | do. a. | 2,099.81 | 551 | 3782 | 1.60 | 650.00 | 40.0 |
| Ninth | E. | D. | Southeast and southwest. | do. a. | 1,471.00 | 323 | 3782 | 1.60 | 260.00 | |
| | | G. | Southeast | do. a. | 1,678.75 | 485 | 3782 | 1.60 | 97.00 | 244.0 |
| Total | | | | Asphalt | 25,052.83 | 7,764 | | | | |
| | | | | Asphalt block | 23,585.55 | 6,586 | | | 15,454.90 | |

COUNTY RO

| | | | | | | | | | | |
|-------------------------------------|--------------------|-----------------|-----------|--------------------|-----------|--------|------|--------|------------|----------|
| Albemarle | Connecticut avenue | Twentieth | Northwest | Grading | | | 4042 | \$0.44 | 14,405.00 | |
| Brookland avenue | Bates road | Michigan avenue | Northeast | do. | | | 4011 | .34 | 4,484.00 | |
| Chesapeake | Brookville | Grant road | Northwest | Macadam | 2,071.00 | 1,500 | 3951 | .39 | 1,859.00 | |
| Euclid | Champlain | Columbia road | do. | do. | 375.00 | 135 | 3959 | .43 | 615.00 | |
| Harvard | West of | Fourteenth | do. | Asphalt | 1,808.10 | 555 | 3910 | 1.69 | 358.00 | 40.0 |
| Kalorama road | Eighteenth | Champlain | do. | Asphalt block | 783.03 | 229 | 3909 | 1.65 | 695.82 | 4.3 |
| Kenyon | Thirteenth | Sherman avenue | do. | Macadam | 2,322.00 | 870 | 3959 | .43 | 340.00 | |
| Lincoln road | R. | T. | Northeast | do. | 3,318.00 | 1,070 | 3959 | .39 | 2,738.00 | |
| Newark | Thirty-third | Highland place | Northwest | do. | 1,640.00 | 800 | 3959 | .43 | 3,321.00 | 306.8 |
| Nichols avenue and Livingston road. | | | Southeast | do. | 5,000.00 | 2,000 | | | | |
| Randolph | North Capitol | First | Northwest | Asphalt | 2,681.91 | 805 | 3920 | 1.68 | 437.10 | 400.00 |
| Rhode Island avenue | do. | do. | do. | do. | 4,106.17 | 825 | 3920 | 1.68 | 868.39 | 50.00 |
| Rittenhouse | Georgia avenue | Blair road | do. | Grading | | | 4028 | .34 | 14,800.00 | |
| Rittenhouse | Chevy Chase | do. | do. | do. | | | 4028 | .34 | 4,910.00 | |
| Seaton | North Capitol | First | do. | Asphalt | 2,673.86 | 802 | 3920 | 1.68 | 525.00 | 100.00 |
| Sheriff road | | | | Macadam | 5,000.00 | | | | | |
| Shepherd | Fifth | Eight | Northwest | do. | 2,600.00 | 1,060 | 3959 | .43 | 431.00 | |
| T. | North Capitol | Lincoln road | Northeast | Asphalt block | 1,202.79 | 309 | 3909 | 1.65 | 487.03 | |
| Eleventh | Columbia road | Irving | Northwest | Asphalt | 1,401.01 | 375 | 3920 | 1.68 | 105.31 | 130.00 |
| Fifteenth, extended | Florida avenue | Euclid | do. | Macadam | 3,911.00 | 1,600 | 3959 | .43 | 4,831.00 | 295.70 |
| Sixteenth | | | do. | Grading | | | 3967 | .29 | 118,500.00 | |
| Eighteenth | Irving | Lamont | do. | Macadam | 1,630.00 | 610 | 3959 | .43 | 3,920.00 | |
| Massachusetts avenue | Wisconsin | Nebraska avenue | do. | Grade and improve. | | | (b) | | | |
| | | | | Asphalt | 12,671.05 | 3,362 | | | | |
| | | | | Asphalt block | 1,985.82 | 538 | | | | |
| | | | | Macadam | 27,867.00 | 11,645 | | | | |
| Total | | | | | 42,523.87 | 15,545 | | | 178,594.65 | 1,326.97 |

a Paid from 1907 appropriation.

b Incomplete.

| Street. | From— | To— | Section. | Kind of pavement. | Square yards. | Length. | No. of contract. | Price per square yard. | Ordinary grading. |
|-------------------------------------|----------------------|----------------------|----------------|-------------------|---------------|------------------|------------------|------------------------|------------------------|
| | | | | | | | | | |
| C, north side..... | Seventh..... | Ninth..... | Southwest..... | Asphalt..... | 1,488.54 | <i>Feet.</i> 498 | 3910 | | <i>Cu. yds.</i> 200.00 |
| C, south side..... | do..... | do..... | do..... | do..... | 1,052.05 | 290 | 3910 | \$1.69 | 405.00 |
| D..... | Ninth..... | Fourth..... | do..... | do..... | 2,195.95 | 581 | 3910 | 1.69 | 574.00 |
| D..... | Eleventh..... | Twelfth..... | do..... | do..... | 1,514.19 | 355 | 3910 | 1.69 | 350.00 |
| D..... | Twelfth..... | Fourteenth..... | do..... | do..... | 3,097.94 | 1,013 | 3910 | 1.69 | 600.00 |
| F..... | Second..... | Third..... | Northeast..... | do..... | 671.63 | | 3927 | 1.59 | 728.00 |
| Maryland avenue..... | Sixth..... | Seventh..... | Southwest..... | do..... | 397.41 | 449 | 3910 | 1.63 | 351.00 |
| Do..... | Ninth..... | Eleventh..... | do..... | do..... | 2,640.23 | 522 | 3910 | 1.69 | 570.00 |
| Virginia avenue, north side..... | South Capitol..... | Delaware avenue..... | do..... | do..... | 2,484.57 | 823 | 3910 | 1.69 | 570.00 |
| Virginia avenue..... | Sixth..... | Seventh..... | do..... | do..... | 3,408.16 | 1,125 | 3927 | 1.63 | 200.00 |
| Do..... | Four-and-a-half..... | Sixth..... | do..... | do..... | 1,287.30 | 448 | 3910 | 1.69 | 322.00 |
| Do..... | Second..... | Four-and-a-half..... | do..... | do..... | 2,448.64 | 779 | 3910 | 1.69 | 565.00 |
| Do..... | First..... | Second..... | do..... | do..... | 850.34 | 272 | 3910 | 1.69 | 110.00 |
| Second..... | E..... | G..... | Northeast..... | do..... | 1,303.56 | 572 | 3927 | 1.63 | 300.00 |
| Second, intersection E..... | do..... | do..... | do..... | do..... | 1,617.96 | 905 | 3927 | 1.59 | 1,040.00 |
| Third..... | Virginia avenue..... | D..... | Southwest..... | do..... | 775.36 | 230 | 3927 | 1.59 | 154.00 |
| Seventh and K..... | do..... | do..... | Southwest..... | do..... | 807.78 | 222 | 3927 | 1.63 | 168.00 |
| Sixth, at Virginia avenue..... | do..... | do..... | Southwest..... | do..... | 337.50 | | 3910 | .49 | 23.00 |
| Ninth..... | C..... | D..... | do..... | do..... | 2,351.56 | 609 | 3910 | 1.69 | 942.00 |
| Do..... | Maryland avenue..... | Virginia avenue..... | do..... | do..... | 1,216.49 | 438 | 3910 | 1.69 | 190.00 |
| Tenth..... | C..... | Maryland avenue..... | do..... | do..... | 1,442.08 | 421 | 3910 | 1.69 | 324.00 |
| Fourteenth..... | D..... | Water..... | do..... | do..... | 867.21 | 250 | 3910 | 1.69 | |
| Fourteenth, intersection Water..... | do..... | do..... | do..... | Grading..... | 2,838.44 | 661 | (b) | 1.50 | 240.00 |
| Streets in vicinity of Plaza..... | do..... | do..... | do..... | do..... | | | | .40 | 1,472.00 |
| Total..... | | | | | 38,632.02 | 11,463 | | | 262,993.51 |

TABLE F.—Repairs to asphalt pavements under contract with the Brennan Construction Company (No. 3927) for year ending June 30

| Street. | From— | To— | Repairs to asphalt. | | | | | | | New gutters. | | | Curb work. | | | | | | |
|---------------------------------------|--------------------------|--------------------------|---------------------|-------------------|-------------------|--------------------|-----------------------|-------------------|------------------------|--------------------------|--------------------------------------|-------------------|-----------------|------------------------|---------------------|---------------------|---------------------|---------------|-----------------------|
| | | | New pavement. | Resurfacing. | Base. | Binder. | Old pavement removed. | Grading. | Total cost of repairs. | Vitrified block gutters. | Grading and removal of old material. | Number of blocks. | Cost of blocks. | Total cost of gutters. | Old curb removed. | Curb set. | Curb reset. | Cost of curb. | Total cost curb work. |
| | | | <i>Sq. yards.</i> | <i>Sq. yards.</i> | <i>Cu. yards.</i> | <i>Cubic feet.</i> | <i>Cu. yards.</i> | <i>Cu. yards.</i> | | <i>Sq. yards.</i> | <i>Cu. yards.</i> | | | | <i>Linear feet.</i> | <i>Linear feet.</i> | <i>Linear feet.</i> | | |
| E se..... | South Capitol..... | First..... | 3,932.90 | 95.30 | | 155.00 | 4,000.00 | 450.00 | \$7,360.66 | 11.24 | 150.00 | 500 | \$10.45 | \$94.75 | 843.00 | 801.66 | 930.03 | \$909.41 | \$1,417.81 |
| L nw..... | North Capitol..... | New Jersey avenue..... | 4,417.43 | 309.89 | 6.00 | 903.00 | 885.00 | 300.00 | 8,902.33 | 790.66 | 640.00 | 37,616 | 786.17 | 1,974.88 | 530.00 | 89.90 | 2,886.20 | 115.22 | 818.99 |
| North Capitol..... | K..... | Pierce..... | | 2,396.37 | 37.50 | 5,130.00 | 88.00 | | 2,927.26 | 359.99 | 23.00 | 16,500 | 344.85 | 942.19 | 18.24 | 24.00 | 301.08 | 26.57 | 99.40 |
| Pennsylvania avenue a..... | Sixth..... | Fifteenth..... | 7,750.00 | | 280.00 | 5,632.00 | 280.00 | | 9,199.50 | 700.00 | | 29,420 | 647.24 | 1,557.24 | | 3,300.00 | | 2,511.86 | 3,714.94 |
| Pennsylvania avenue..... |do..... |do..... | 11,543.00 | 28,212.01 | 4,297.00 | 82,528.00 | 4,255.00 | | 106,941.88 | 1,814.61 | 1,280.00 | 75,152 | 3,765.73 | 4,549.58 | 8,185.00 | 5,725.23 | 2,567.01 | 4,359.19 | 14,039.61 |
| Pennsylvania avenue (south side)..... | Seventeenth..... | Eighteenth..... | 509.00 | 1,811.94 | 25.00 | 4,292.00 | 145.00 | | 3,441.68 | 193.97 | 7.00 | 8,872 | 188.42 | 448.63 | | | 212.00 | | 61.00 |
| Fourth nw..... | D..... | E..... | 1,589.19 | 81.80 | 14.00 | 152.00 | 388.00 | | 3,221.60 | 224.25 | 88.00 | 10,668 | 222.96 | 590.50 | | 465.00 | 9.08 | 402.21 | 611.00 |
| Seventh nw..... | Pennsylvania avenue..... | Market space..... | 327.00 | | | | 100.00 | 25.00 | 1,098.18 | 41.79 | | 1,850 | 38.67 | 104.66 | | | 115.81 | | 23.00 |
| Twelfth nw..... |do..... | E..... | | 1,145.23 | 115.00 | 2,240.00 | 40.00 | | 2,510.02 | 185.14 | 15.00 | 8,040 | 168.04 | 267.43 | | | 198.80 | | 65.00 |
| Thirteenth nw..... |do..... |do..... | | 603.33 | 50.00 | 1,700.00 | 22.00 | | 1,202.52 | 95.88 | 10.00 | 4,000 | 83.60 | 214.08 | 141.00 | 140.94 | | 120.47 | 192.00 |
| Fourteenth nw..... | Thomas circle..... | Rhode Island avenue..... | | 2,241.89 | 17.00 | 5,364.00 | 54.00 | | 3,060.76 | 236.96 | 16.00 | 11,274 | 235.63 | 556.06 | | 119.09 | 183.74 | 100.91 | 212.00 |
| B se..... | Second..... | Fifth..... | | | | | | | | | | | | | | | | | |
| First nw..... | Bryant..... | Douglas..... | 2,773.58 | 35.03 | | 104.00 | 530.00 | 370.00 | 5,347.92 | 379.23 | 60.00 | 8,152 | 170.38 | 856.38 | 44.00 | 31.86 | 1,499.68 | 28.08 | 530.00 |
| First ne. c..... | C north..... | B south..... | | | | | | | | | | | | | | | | | |
| Total..... | | | 32,806.10 | 36,932.79 | | | 10,787.00 | 1,145.00 | 155,214.31 | 5,033.72 | 2,265.00 | 212,044 | 6,659.14 | 12,156.38 | 10,226.24 | 10,697.31 | 8,903.43 | 8,573.92 | 21,779.00 |

a Paid from 1907 appropriation.

b Final measurement not made.

c Pavement over tunnel paid for by

Minor repairs.

| | |
|---|-------------|
| 113, 107.80 cubic feet surface, at 44 cents..... | \$49,767.43 |
| 67, 143.30 cubic feet binder, at 25 cents..... | 16,787.08 |
| Minor repairs for June, 1907, paid from 1908 appropriation..... | 6,649.13 |
| | 73,203.64 |

n Construction Company (No. 3927) for year ending June 30, 1908.

| New gutters. | | | Curb work. | | | | | Total cost of street. | Original pavement. | | | Completed. |
|-------------------|-----------------|------------------------|---------------------|---------------------|---------------------|---------------|--------------------------|-----------------------|-----------------------------------|------------|---|---------------|
| Number of blocks. | Cost of blocks. | Total cost of gutters. | Old curb removed. | Curb set. | Curb reset. | Cost of curb. | Total cost of curb work. | | Character of pavement. | Year laid. | Contractor. | |
| 500 | \$10.45 | \$94.75 | Linear feet. 843.00 | Linear feet. 801.66 | Linear feet. 930.03 | \$909.41 | \$1,417.00 | \$8,872.41 | Asphalt block..... | 1896 | Washington Asphalt Block and Tile Co..... | Dec. 18, 1907 |
| 37,616 | 786.17 | 1,974.88 | 530.00 | 89.90 | 2,886.20 | 115.23 | 818.52 | 11,695.73 | Asphalt..... | 1890 | Cranford Paving Co..... | Nov. 8, 1907 |
| 16,500 | 344.85 | 942.19 | 18.24 | 24.00 | 301.08 | 26.57 | 96.66 | 3,966.11 | do..... | 1890 | Barber Asphalt Paving Co..... | June 1, 1908 |
| 29,420 | 647.24 | 1,557.24 | | 3,300.00 | | 2,511.86 | 3,714.31 | 14,471.05 | do..... | 1891 | Cranford Paving Co..... | Dec. 28, 1907 |
| 75,152 | 3,765.73 | 4,549.68 | 8,185.00 | 5,725.23 | 2,567.01 | 4,359.19 | 14,036.18 | 125,527.64 | do..... | 1891 | do..... | Do. |
| 8,872 | 185.42 | 448.63 | | | 212.00 | | 61.52 | 3,951.83 | Coal tar..... | 1871 | J. O. Evans..... | Apr. 6, 1908 |
| 10,688 | 222.96 | 590.50 | 465.00 | 464.63 | | 9.08 | 402.21 | 611.65 | do..... | 1872 | Thos. Lewis & Co..... | Dec. 13, 1907 |
| 1,850 | 38.67 | 104.66 | | | 115.81 | | 23.16 | 1,226.00 | do..... | 1875 | Cranford & Hoffman..... | June 19, 1907 |
| 8,040 | 168.04 | 267.43 | | | 198.80 | | | 65.46 | Asphalt..... | 1878 | J. S. Baldwin..... | July 6, 1907 |
| 4,000 | 83.60 | 214.08 | 141.00 | 140.94 | | 120.47 | 192.34 | 1,608.94 | do..... | 1878 | Cranford & Hoffman..... | Oct. 10, 1907 |
| 11,274 | 235.63 | 556.06 | | 119.09 | 183.74 | 100.91 | 212.63 | 3,829.45 | do..... | 1882 | A. L. Barber..... | Dec. 18, 1907 |
| 8,152 | 170.38 | 856.38 | 44.00 | 31.86 | 1,499.68 | 28.08 | 530.40 | 6,784.70 | do..... | 1881 | H. L. Cranford..... | |
| | | | | | | | | | Coal tar, B north to B south..... | 1893 | Cranford Paving Co..... | Apr. 22, 1908 |
| | | | | | | | | | Asphalt, B north to C north..... | 1881 | J. O. & C. E. Evans..... | |
| 212,044 | 6,659.14 | 12,156.38 | 10,226.24 | 10,697.31 | 8,903.43 | 8,573.92 | 21,779.83 | 193,150.52 | | | Cranford Paving Co..... | |

c Pavement over tunnel paid for by Pennsylvania R. R. Co., \$20,000 on account.

airs.

| | |
|-------|-------------|
| ..... | \$49,767.43 |
| ..... | 16,787.08 |
| ..... | 6,649.13 |
| ..... | 73,203.64 |

TABLE H.—*Work done by day labor under the appropriation for "Repairs to streets, avenues, and alleys," from July 1, 1907, to June 30, 1908.*

| | | | |
|--|----------|--|-------------|
| Brick sidewalk relaid.....square yards.. | 8,650.50 | Asphalt tile relaid.....square yards.. | 710.00 |
| Asphalt block repaved.....do.... | 6,875.00 | Cement walk laid.....do.... | 1,877.00 |
| Vitrified block paved.....do.... | 247.00 | Grading.....cubic yards.. | 2,831.00 |
| Vitrified block repaved.....do.... | 6,215.00 | Grading.....square yards.. | 2,645.00 |
| Cobble paved.....do.... | 6,945.00 | | |
| Curb reset.....linear feet.. | 925.30 | Labor..... | \$24,255.54 |
| Flag relaid.....do.... | 2,360.00 | Material..... | 1,870.89 |
| Granite block laid.....square yards.. | 3,150.00 | | |

3,328 dangerous holes repaired.

60246—08—3

TABLE I.—Regular

| Job No. | Location. | For whom done. | Grading. | Cement sidewalk. |
|---------|--|--------------------------------------|-----------------|------------------|
| | | | <i>Cu. yds.</i> | <i>Sq. yds.</i> |
| 2011 | 1433 Georgia avenue se. (1907)..... | Harry Le Laurin..... | | 10.67 |
| 2054 | 3401 Thirty-fourth place, Cleveland Park (1907)..... | T. H. Kearney..... | | 49.97 |
| 2059 | 222 and 224 Bryant street nw. (1907)..... | Ferdinand Miller..... | 21.00 | 35.72 |
| 2062 | C street, side 221 Tenth street nw. (1907)... | Lewis Hoffenmaier..... | | 96.20 |
| 2063 | 1011-1013 Euclid street nw. (1907)..... | J. C. K. Campbell..... | | 24.09 |
| 2069 | Ninth street nw., between Jefferson and Longfellow (1907)..... | John Taylor Armes..... | 77.00 | 232.67 |
| 2070 | Fourteenth and Decatur streets nw. (1907)..... | Capital Traction Co..... | 156.86 | 204.27 |
| 2071 | 1901 Fourteenth street nw. (1907)..... | John C. Cook..... | | 16.98 |
| 2074 | 625 Pennsylvania avenue nw. (1907)..... | Ed. P. Schwartz..... | | 45.5 |
| 2076 | South side Newton street nw., between Fourteenth and Holmead (1907)..... | Harry Wardman..... | | 316.60 |
| 2077 | Fourteenth and Quincy streets, sides lots 10 to 19 (1907)..... |do..... | | 349.42 |
| 2079 | Flagler place, sides 136 Adams street (1907)..... | Ed. P. Stanly..... | | 56.6 |
| 2080 | 627 Pennsylvania avenue nw. (1907)..... | I. M. G. Hall..... | | 49.78 |
| 2081 | North side Decatur street, between Fifteenth and Piney Branch road; westside Fourteenth street, between Decatur street and Delafield place, and south side Delafield place, between Fourteenth and Fifteenth streets (1907)..... | B. F. Saul Co..... | 10.00 | 626.79 |
| 2082 | Twentieth street, side of 1520 Twentieth street nw. (1907)..... | T. T. Gaff..... | | 91.19 |
| 2000 | Alley, square 222..... | James Berrall..... | 50.00 | |
| 2001 | Driveway front 1117 Eighteenth street nw. | Wm. Corcoran Hill..... | | |
| 2002 | West side of First street nw., from P to Bates..... | Chas. J. Walker..... | | 270.80 |
| 2003 | South side of L street, between Terminal and First..... | Union Trust Co..... | 312.00 | |
| 2004 | 127 Seaton street nw..... | H. R. Howenstein Co..... | | 13.25 |
| 2005 | Kenyon street nw., lots 1 to 22..... | Chas. W. King..... | 33.00 | 294.64 |
| 2006 | Southwest corner Sixteenth street and Kalorama avenue, lot 50..... | J. B. Henderson..... | | 159.01 |
| 2007 | West side of R street nw., between Twenty-second and Twenty-third streets..... | Geo. O. Totten..... | 120.00 | 57.55 |
| 2008 | Massachusetts avenue and Sheridan circle, sides lots 10 and 11..... |do..... | | 238.77 |
| 2009 | West side Seventh street, between Taylor and Upshur streets..... | Building and Supply Corporation..... | | 191.67 |
| 2010 | East side Brightwood avenue, between Shepherd and Taylor streets..... |do..... | | 88.67 |
| 2011 | Sheridan circle, side of lot 12..... | Geo. O. Totten..... | | 137.89 |
| 2012 | West side Todd place to Lincoln road and west side Lincoln road from Todd place to alley..... | A. P. Clark, jr..... | | |
| 2013 | 630 Pennsylvania avenue nw..... | Kingan & Co..... | | 43.65 |
| 2014 | 131 to 140 Rhode Island avenue nw..... | Bates Warren..... | | 68.57 |
| 2015 | North side of Q street from Eckington place west..... | Harrison Realty Co..... | 220.00 | |
| 2016 | Northeast corner Eleventh and E streets nw..... | A. Getz & Son..... | | |
| 2017 | South side of G street se., between Thirtieth and Fourteenth streets..... | Harry Wardman..... | | 200.12 |
| 2018 | 700 and 702 Ninth street nw..... | W. C. Dodge..... | | 73.59 |
| 2020 | Express building, Second and I streets ne..... | Washington Terminal Co..... | | |
| 2021 | North side Massachusetts avenue, between Fifteenth street and Scott circle..... | Laura W. Lowndes..... | | 243.94 |
| 2022 | North side Massachusetts avenue, between Fifteenth street and Scott circle, lot 2..... | T. L. MacDonald..... | | 236.47 |
| 2023 | 1503, 1510, and 1512 Seventh street nw..... | Chas. D. Fowler..... | | 100.57 |
| 2024 | 1424 Twenty-first street nw..... | John A. Hughes..... | | 28.53 |
| 2025 | Southwest corner Todd place and Lincoln road..... | L. J. Grieb..... | | |
| 2026 | New Hampshire avenue, lot 809, square 2831..... | L. E. Breuninger..... | | |
| 2027 | Southwest corner First and B streets..... | Colburn Bros..... | | |
| 2028 | Northeast corner Twenty-first and R streets..... | Mrs. John Boit..... | | 43.15 |
| 2029 | 219-223 H street nw..... | Dr. M. E. Miller..... | | 66.36 |
| 2030 | North side Monroe street, between Holmead and Fourteenth streets..... | A. H. Bailey..... | | 86.85 |
| 2032 | 709 H street nw..... | Mathilda Behrend..... | | 21.43 |
| 2033 | 1125-1127 Robinson street sw..... | Geo. W. Pearson..... | | 21.62 |
| 2034 | Fifteenth street, between A street and Ames place ne., and south side of Ames, between Fourteenth and Fifteenth streets..... | Kennedy & Davis Co..... | | 447.83 |

OPERATIONS OF THE ENGINEER DEPARTMENT, D. C.

13

permit, 1908.

[illegible]

TABLE I.—Regular

| Job No. | Location. | For whom done. | Grading. | Cement sidewalk. |
|---------|---|---|-----------------|------------------|
| | | | <i>Cu. yds.</i> | <i>Sq. yds.</i> |
| 2035 | Northside of P street nw., between Twentieth and Thirtieth streets, and Thirtieth street, between P and Q streets, lot 226. | J. H. Bradley..... | | 170.91 |
| 2036 | Third street sw., between E street and Virginia avenue. | P., B. & W. R. R. Co..... | | |
| 2037 | New Jersey avenue and South Capitol street, sides new Congress Hall. | James L. Parsons..... | | 187.99 |
| 2038 | Champlain avenue and Columbia road, sides. | L. W. Walker..... | | 314.37 |
| 2039 | Ryland M. E. Church, Tenth and D streets. | D. Herbert Richardson..... | | 206.87 |
| 2040 | 3611 R street nw..... | John J. Bourke..... | | 13.27 |
| 2041 | Fourteenth and Warren streets ne., lot 3..... | H. R. Howenstein Co..... | | |
| 2042 | 1420 Twenty-first street nw..... | Thos. H. McKee..... | | 25.95 |
| 2043 | Seventeenth and H streets fronts, Metropolitan Club. | Thos. Hyde..... | | |
| 2045 | North side Ames place, between Fourteenth and Fifteenth streets, and west side Fifteenth street, between Ames place and B street. | Kennedy & Davis Co..... | | |
| 2046 | 132 Rhode Island avenue nw..... | T. L. Lewis..... | | 17.14 |
| 2047 | West side Ontario road, between Florida avenue and Kalorama road. | John Miller..... | | |
| 2048 | South side of Kenyon street nw., between Sixth and Seventh streets. | Chas. W. King..... | | |
| 2049 | Fifteenth street, side Union Trust Co. building. | Union Trust Co..... | | 378.21 |
| 2050 | 1108 G street nw..... | Fred. Drew, for J. B. Henderson..... | | |
| 2051 | 919 H street nw..... | Chas. Cassidy..... | | |
| 2052 | 2135 Wyoming avenue nw..... | Henry H. Ward..... | | |
| 2031 | New Jersey avenue and South Capitol street. | Congress Hall Hotel Co..... | | |
| 2062 | Rock Creek Church road, between Spring road and Monroe street. | L. E. Breuninger..... | | |
| 2053 | North side Garfield street nw., Twenty-seventh street to alley. | A. R. Townshend..... | | 250.81 |
| 2054 | East side Fifth street nw. from V street south to alley. | J. W. Glennan..... | | 107.67 |
| 2055 | North side Ames street ne., between Fourteenth and Fifteenth streets. | Kennedy & Davis Co..... | | 269.27 |
| 2056 | West side Fifteenth street ne., between East Capitol and A street. | Washington Railway and Electric Co..... | | 189.18 |
| 2057 | East side Fourteenth street nw., between Randolph and Taylor streets. | Harry Wardman..... | | 354.15 |
| 2058 | 3701-3711 Fourteenth street nw..... | do..... | | 155.25 |
| 2059 | 3642 to 3650 Eleventh street, nw..... | Alex Millar..... | | 69.30 |
| 2060 | Brightwood avenue, side lot 35, square 2909. | H. G. and Margt. E. Wilson..... | | 73.73 |
| 2061 | 644 C street ne..... | Clara R. Boyd..... | | 16.18 |
| 2063 | Alley east part square 2677..... | John H. Nolan..... | 319.00 | |
| 2064 | Alley square 374..... | B. S. Simmons..... | 9.00 | |
| 2065 | 1729 Euclid street nw..... | Addie A. Crisswell..... | | 13.00 |
| 2066 | Euclid street and Ontario road..... | Mary E. Lewis..... | | 95.50 |
| 2067 | 1717-1727 Euclid street nw..... | Swartzell, Rheem, Henzey Co..... | | 77.72 |
| 2068 | 1123 Robinson street sw..... | Wm. E. Pearson..... | | 9.38 |
| 2069 | South side D street se., between Kentucky avenue and Fifteenth street. | Thos. H. Melton..... | | 103.93 |
| 2071 | West side Eleventh street, nw., Rhode Island avenue, south to alley. | L. C. Williamson..... | | 142.02 |
| 2072 | Douglas street nw., between Fourteenth street and University place. | Wm. H. Walker..... | | 93.77 |
| 2073 | 3405 to 3427 Fourteenth street, nw..... | Harry Wardman..... | | 249.02 |
| 2075 | East side Ontario road, between Euclid street and Columbia road. | Swartzell, Rheem, Henzey Co..... | | 11.33 |
| 2076 | Trinity College, Brookland..... | Chas. Darr..... | 23.00 | |
| 2077 | 2208 to 2222 Flagler place..... | Lillie H. Mattern..... | | 130.54 |
| 2078 | Fourteenth and Monroe streets, sides lot 21. | Edwin Yarnold..... | | 166.27 |
| 2079 | Clifton street, between Fourteenth and Fifteenth streets, lot 808. | C. E. West..... | | 19.57 |
| 2080 | 317 Pennsylvania avenue se..... | Jos. A. Repetti..... | | 51.42 |
| | Total..... | | 1,350.86 | 9,305.10 |

permit, 1908—Continued.

| Curb reset. | Curb set. | | | Vitrified block paved. | Asphalt block paved. | Cobble. | Brick sidewalk paved. | Brick sidewalk repaved. | Cost. |
|----------------|-----------|----------|----------|------------------------------|----------------------------|----------|-----------------------------|-------------------------------|-----------|
| | 6 by 20. | 8 by 8. | Old. | | | | | | |
| Lin. ft. | Lin. ft. | Lin. ft. | Lin. ft. | Sq. yds. | Sq. yds. | Sq. yds. | Sq. yds. | Sq. yds. | |
| | 212.40 | | | | | | | | \$248.14 |
| 22.00 | | 77.80 | | | | | | | 219.14 |
| | | | | | | | | | 346.59 |
| | | | | | | | | | 228.07 |
| | 112.00 | 23.20 | | | | | | | 16.44 |
| | | 272.60 | | | | | | | 156.55 |
| | 678.53 | | | | | | | | 63.67 |
| | | | | | | | | | 373.01 |
| | | | | | | | | | 917.87 |
| | 382.50 | | | | | | | | 21.23 |
| | | 133.83 | | | | | | | 539.12 |
| | | 182.19 | | | | | | | 192.00 |
| | | 25.00 | | | | | | | 476.28 |
| | | 62.00 | | | | | | | 38.19 |
| 3.50 | | 106.66 | | | | | | | 80.97 |
| | 40.50 | 78.33 | | | | | | | 158.65 |
| | | | | | | | | | 114.84 |
| 354.00 | | | | | | | | | 56.98 |
| | 160.00 | | | | | | | | 428.70 |
| | | | | | | | | | 372.20 |
| 20.15 | 343.21 | | | | | | | | 297.76 |
| | | | | | | | | | 701.31 |
| | | | | | | | | | 440.89 |
| 17.45 | | | | | | | | | 192.36 |
| | | | | | | | | | 85.85 |
| | | | | | | | | | 91.35 |
| | | | | | | | | | 24.39 |
| | | | | | 419.00 | | | | 895.98 |
| 17.00 | | | | | 91.00 | | | | 200.50 |
| 37.00 | | | | | | | | | 19.67 |
| 107.00 | | | | | | | | | 126.09 |
| | | 13.10 | | | | | | | 118.76 |
| | | | | | | | | | 27.97 |
| | | | | | | | | | 114.58 |
| 138.00 | | | | | | | | | 195.80 |
| 40.00 | | | | | | | | | 113.14 |
| | | | | | | | | | 308.53 |
| | | | | | | | | | 14.03 |
| 50.00 | | | | | | 27.00 | | 123.00 | 90.32 |
| | | 4.71 | 10.75 | | | | | | 151.80 |
| | | | | | | | | | 221.51 |
| 33.85 | | | | | | | | | 21.58 |
| | | | | | | | | | 74.27 |
| 1,309.65 | 3,659.65 | 1,717.63 | 304.96 | 30.67 | 1,346.31 | 27.00 | 205.00 | 123.00 | 22,453.10 |

TABLE K.—ASSESS

| Job No. | Location. | Grading. | Cement sidewalk. |
|---------|---|-----------------|------------------|
| | | <i>Cu. yds.</i> | <i>Sq. yds.</i> |
| 3037 | East side Wallach street nw., from Thirteenth to Fourteenth street (1907) .. | ..... | 839.43 |
| 3039 | Both sides Second street ne., from Maryland avenue to C street (1907) ..... | ..... | 855.72 |
| 3044 | North side U street nw., from Fourteenth to Fifteenth street (1907) ..... | ..... | 193.38 |
| 3045 | Both sides U street nw., from Fifteenth to Sixteenth street (1907) ..... | ..... | 748.03 |
| 3046 | North side U street nw., from Thirteenth to Fourteenth street (1907) ..... | ..... | 487.83 |
| 3077 | South side Corcoran street nw., from Fifteenth street to alley west (1907) .. | ..... | 286.37 |
| 3083 | Both sides Tenth street ne., from C to D street (1907) ..... | ..... | 860.11 |
| 3090 | Both sides Q street nw., from New Jersey avenue to Fifth street (1907) ..... | ..... | 1,173.12 |
| 3094 | West side Fourteenth street nw., from S to T street (1907) ..... | ..... | 656.39 |
| 3096 | East side Third street se., between C street and North Carolina avenue (1907) .. | ..... | 332.54 |
| 3100 | East side Fourteenth street nw., from Riggs to S street (1907) ..... | ..... | 256.79 |
| 3111 | North side Corcoran street nw., between Fifteenth and Sixteenth streets (1907) ..... | ..... | 273.54 |
| 3112 | E street and Tennessee avenue, sides square 1052 (1907) ..... | ..... | 555.00 |
| 3117 | West side Eighth street nw., between Shepherd street and alley north (1907) .. | ..... | 113.87 |
| 3130 | Both sides Bates street nw., between First and Third streets (1907) ..... | ..... | 504.76 |
| 3134 | Both sides Otis place nw., between Tenth and Eleventh streets (1907) ..... | ..... | 340.17 |
| 3135 | South side Georgia avenue se., between Fourteenth and Fifteenth streets (1907) ..... | ..... | 276.17 |
| 3137 | Both sides Second street se., between N and River (1907) ..... | ..... | 580.64 |
| 3138 | East side Fourteenth street ne., between C and D streets (1907) ..... | ..... | 364.87 |
| 3142 | Sixteenth and Mount Pleasant streets, side of lots 59, 60, and 61 (1907) ..... | ..... | 203.14 |
| 3149 | South side of Seaton place, between North Capitol and First streets (1907) .. | ..... | 518.45 |
| 3158 | South side of B street se., from Twelfth street to Kentucky avenue (1907) .. | ..... | 615.53 |
| 3162 | North side Manor street, between Warder street and Soldiers Home (1907) .. | ..... | 177.80 |
| 3164 | North side Pennsylvania avenue se., between Twelfth and Thirteenth streets (1907) ..... | ..... | 630.48 |
| 3166 | East side of North Capitol street, between Randolph and S streets (1907) .. | ..... | 345.79 |
| 3167 | East side of Eleventh street, from Euclid street to Park road (1907) ..... | ..... | 860.85 |
| 3171 | Both sides of Maryland avenue and D street ne., from Sixth to Seventh street (1907) ..... | ..... | 833.18 |
| 3172 | Both sides G street ne., from Tenth to Eleventh street (1907) ..... | ..... | 439.11 |
| 3183 | Both sides Maryland avenue ne., from Third to Fourth street (1907) ..... | ..... | 1,201.67 |
| 3184 | South side of G street ne., from Eleventh to Twelfth street (1907) ..... | ..... | 318.57 |
| 3185 | Both sides of Maryland avenue ne., from First to Second street (1907) ..... | ..... | 1,197.04 |
| 3186 | North side of Maryland avenue ne., between Second and Third streets (1907) .. | ..... | 405.05 |
| 3189 | North side of East Capitol street, from Seventh to Tenth street (1907) ..... | ..... | 1,282.63 |
| 3199 | South side of P street nw., from Ninth to Eleventh street (1907) ..... | ..... | 786.48 |
| 3219 | North side Kenyon street, from west line lot 6 to Thirteenth street (1907) .. | ..... | 33.37 |
| 3223 | Both sides of Q street nw., between Fourteenth and Sixteenth streets and south side Q street, between Sixteenth and Seventeenth streets (1907) .. | ..... | 2,930.94 |
| 3229 | Both sides of Third street ne., from Massachusetts avenue to C street (1907) .. | ..... | 392.54 |
| 3234 | Both sides of Twelfth street nw., from Pennsylvania avenue to E street (1907) ..... | ..... | 420.37 |
| 3237 | North side of H street nw., between Twentieth and Twenty-first streets (1907) .. | ..... | 742.96 |
| 3238 | Both sides of H street nw., between Nineteenth and Twentieth streets (1907) .. | ..... | 375.07 |
| 3241 | West side of Fourteenth street nw., between Corcoran and Q streets (1907) .. | ..... | 996.67 |
| 3244 | Both sides of Seventeenth street nw., between L and M streets (1907) ..... | ..... | 1,804.79 |
| 3260 | East side of Fifteenth street nw., from Q to L street (1907) ..... | ..... | 727.19 |
| 3261 | North side of S street nw., from Eleventh to Twelfth streets and Twelfth to Thirteenth streets (1907) ..... | ..... | 86.10 |
| 3270 | South side of Maryland avenue ne., from Second to B street (1907) ..... | ..... | 1,380.90 |
| 3279 | Both sides of Thirteenth street nw., from Massachusetts avenue to N street (1907) ..... | ..... | 113.07 |
| 3282 | South side of H street ne., from east line Washington Terminal Co. to Second street (1907) ..... | ..... | 167.07 |
| 3296 | East side of Second street nw., from Todd to Elm street (1907) ..... | ..... | 325.94 |
| 3300 | North side of Monroe street nw., between Fourteenth and Sixteenth streets (1907) ..... | ..... | 191.13 |
| 3303 | South side of Oak street from Center street eastward (1907) ..... | ..... | 718.81 |
| 3304 | North side Kenyon street nw., between Brightwood and Sherman avenues (1907) ..... | ..... | ..... |
| 3306 | East side Thirteenth street nw., between Pennsylvania avenue and E street (1907) ..... | ..... | ..... |
| 3307 | South side of E street nw., between Thirteenth and Thirteen-and-a-half street (1907) ..... | ..... | ..... |
| 3308 | North side Market square, between Eighth and Ninth streets (1907) ..... | ..... | ..... |
| 3309 | North side of D street nw., between Tenth and Eleventh streets (1907) ..... | ..... | ..... |
| 3312 | North side of E street nw., between Thirteenth and Fourteenth streets (1907) ..... | ..... | ..... |
| 3318 | Both sides Clifton street nw., between Eleventh and Thirteenth streets (1907) ..... | ..... | ..... |
| 3323 | North side K street nw., from Vermont avenue to Fifteenth street (1907) .. | ..... | 87.46 |
| 3367 | East side Seventeenth street nw., between Euclid street and Columbia road (1907) ..... | ..... | 290.00 |
| 3399 | North side C street nw., between Seventh and Eighth streets (1907) ..... | ..... | ..... |
| 3396 | West side North Capitol street, between R and Randolph streets (1907) .. | ..... | 317.94 |
| 3385 | South side of S street nw., between Eighteenth and Nineteenth streets (1907) .. | ..... | 337.78 |
| 3001 | Both sides Ivy street se., square 693 (1907) ..... | ..... | ..... |
| 3002 | Alley south half square 375 | 180.00 | ..... |

ment, 1908.

| Curb reset. | Curb set. | | | Vitrified block paved. | Asphalt block paved. | Cobble. | Brick side- walk repared. | Cost. |
|-----------------|-----------------|-----------------|-----------------|------------------------------|----------------------------|-----------------|---------------------------------|------------|
| | 6 by 20. | 8 by 8. | Old. | | | | | |
| <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | |
| 977.50 | 25.12 | | 75.00 | | | | | \$1,315.06 |
| 854.20 | 4.71 | | | | | | | 1,281.98 |
| 113.70 | | | | | | | | 254.40 |
| 410.82 | | 4.71 | | | | | | 977.34 |
| | | | | | | | | 582.96 |
| | | 21.86 | | | | | | 401.30 |
| | | | | | | | | 1,053.11 |
| | | | | | | | | 1,401.50 |
| | | 343.59 | | | | | | 790.33 |
| 229.00 | | | 30.00 | | | | | 858.42 |
| | | | | | | | | 378.09 |
| | | | | | | | | 325.69 |
| 10.60 | 60.76 | | | | | | | 768.05 |
| | 190.29 | | | | | | | 408.53 |
| 16.25 | | 490.28 | | | | | | 601.02 |
| | | | | | | | | 1,074.86 |
| 137.50 | 408.41 | | | | | | | 924.44 |
| 470.68 | | | | | | | | 790.22 |
| 334.25 | | | | | | | | 880.70 |
| 48.00 | | | | | | | | 277.52 |
| | | | | | | | | 619.41 |
| 53.11 | 500.20 | | | | | | | 1,442.69 |
| | | | | | | | | 232.24 |
| 593.10 | 10.60 | | | | | | | 930.62 |
| | | | | | | | | 426.86 |
| 34.60 | | 2,771.11 | | | | | | 4,520.24 |
| 217.00 | | | | | | | | 1,060.74 |
| 472.65 | | 458.78 | | | | | | 531.26 |
| | | | | | | | | 2,180.59 |
| 876.00 | 15.65 | | | | | | | 383.52 |
| 354.00 | | | | | | | | 1,701.48 |
| 990.80 | | | | | | | | 576.70 |
| | | | | | | | | 1,833.58 |
| | | | | | | | | 959.16 |
| | | | | | | | | 43.59 |
| 89.92 | | 2,834.04 | | | | | | 7,335.84 |
| 535.00 | 13.91 | | | | | | | 646.50 |
| | | 462.65 | | | | | | 647.06 |
| | | 441.57 | | | | | | 1,039.60 |
| 22.80 | | 683.54 | | | | | | 1,723.73 |
| | | | | | | | | 459.88 |
| 8.15 | | 1,001.78 | | | | | | 2,422.25 |
| 307.00 | 12.35 | 1,322.88 | | | | | | 4,354.40 |
| | | | | | | | | |
| | | 389.83 | | | | | | 1,393.32 |
| 93.50 | | | | | | | | 129.88 |
| 37.86 | | 1,544.43 | | | | | | 3,704.84 |
| | | | | | | | | |
| 16.35 | | 75.31 | | | | | | 140.93 |
| | | | | | | | | 302.01 |
| 22.30 | | | | | | | | 430.59 |
| | 378.60 | | | | | | | 765.57 |
| 12.50 | 801.46 | | | | | | | 2,053.48 |
| | | 165.23 | | | | | | 229.82 |
| | | 333.87 | | | | | | 498.55 |
| | | 268.55 | | | | | | 374.63 |
| | | 287.39 | | | | | | 401.63 |
| | | 339.67 | | | | | | 474.50 |
| | 1,387.35 | | | | | | | 1,570.54 |
| | | 213.59 | | | | | | 396.20 |
| 29.82 | 580.79 | 271.67 | | | | | | 1,181.14 |
| | | | | | | | | 360.60 |
| | | | | | | | | 384.68 |
| | | | | | | | | 405.65 |
| | 1,136.12 | | | | | | | 1,534.88 |
| | | | | 968.00 | | | | 1,933.90 |

TABLE K.—*Assess*

| Job No. | Location. | Grading. | Cement sidewalk. |
|---------|---|-----------------|------------------|
| | | <i>Cu. yds.</i> | <i>Sq. yds.</i> |
| 3003 | Alley square 519..... | 80.00 | |
| 3004 | Alley square 2582..... | 500.00 | |
| 3005 | Various streets, repairing..... | | |
| 3006 | North side Pennsylvania avenue between Ninth and Tenth streets, and east side of Tenth street between Pennsylvania avenue and D street..... | | 264.72 |
| 3007 | Market space between Eighth and Ninth streets nw., and east side Ninth street between Market space and D street..... | | 113.38 |
| 3008 | North side Massachusetts avenue, between Twenty-fourth street and California avenue..... | | 717.14 |
| 3010 | North side Fairmount street, between Sherman avenue and Eleventh street..... | | 232.76 |
| 3012 | Alley square 870..... | 902.00 | |
| 3013 | Both sides Pennsylvania avenue nw., between Four-and-a-half and Fifteenth streets..... | | |
| 3014 | Both sides Newton street nw., from Fourteenth street to Piney Branch road..... | | 104.78 |
| 3015 | North side Pennsylvania avenue nw., between Sixth and Seventh streets..... | 250.00 | |
| 3016 | Alley square 3523..... | | |
| 3017 | West side Second street ne., between N street and Florida avenue..... | | |
| 3018 | North side of N street ne., between First and Second streets..... | | |
| 3019 | Alley square 878..... | 38.00 | |
| 3025 | Alley square 552..... | 162.00 | |
| 3026 | Alley square 2602..... | 1,563.00 | |
| 3027 | Alley square 2506..... | 576.00 | |
| 3028 | Alley square 304..... | 450.00 | |
| 3033 | South side of P street nw., from Eleventh to Twelfth streets..... | | 257.79 |
| 3034 | South side of Virginia avenue sw., between Sixth and Seventh streets..... | | |
| 3037 | Alley square 3026..... | 2,164.00 | |
| 3040 | South side Pennsylvania avenue nw., between Sixth and Seventh streets..... | | 888.92 |
| 3042 | East side University place, from north line Seventeenth to Euclid streets..... | | 77.06 |
| 3043 | West side Fifteenth street nw., between Massachusetts avenue and N street..... | | 174.03 |
| 3044 | Both sides Newton street nw., between Fourteenth and Seventeenth streets..... | | 1,883.31 |
| 3045 | North side Irving street nw., between Sherman avenue and Eleventh street..... | | 66.00 |
| 3046 | West side Eleventh street nw., from Park road to Monroe street..... | | 116.98 |
| 3047 | West side Eleventh street nw., between Monroe and Otis streets..... | | 126.60 |
| 3048 | Both sides Euclid street, between Brightwood and Sherman avenues..... | 384.00 | 1,053.71 |
| 3049 | North side Adams street nw., between First and North Capitol streets..... | | 573.05 |
| 3054 | West side Fourteenth street nw., between Pennsylvania avenue and E street..... | | |
| 3056 | South side Park road and east side of New Hampshire avenue, between Sherman avenue and Eleventh street..... | | 255.68 |
| 3057 | East side Warder street from Manor place to Newton street, and south side of Newton street to a point 350 feet east..... | 91.40 | 365.35 |
| 3061 | Both sides of Eighteenth street nw., from Irving to Lamont streets..... | | |
| 3066 | Both sides Kenyon street nw., from Sherman avenue to Thirteenth street..... | | |
| 3068 | Both sides of O street nw., from Thirtieth to Thirty-second streets..... | | 2,188.33 |
| 3067 | Alley square 2603..... | 1,030.00 | |
| 3071 | Both sides Thirteenth street nw., from B street to Pennsylvania avenue..... | | 1,794.31 |
| 3072 | District of Columbia property yard, Second street and Florida avenue ne..... | | |
| 3077 | South side Irving street nw., between Eleventh and Thirteenth streets..... | | 66.67 |
| 3088 | Alleys square 2853, Columbia Heights..... | 1,479.00 | |
| 3089 | E street so., between Canal street and New Jersey avenue..... | | |
| 3090 | North side of North Carolina avenue ne., between New Jersey avenue and First street..... | | |
| 3091 | East side of Fourth street nw., between D and G streets..... | | |
| 3093 | North side of H street nw., from First to Fourth streets..... | | 1,018.85 |
| 3094 | Both sides of L street nw., between First and North Capitol streets..... | | 1,605.29 |
| 3095 | Both sides of Euclid street, between Champlain avenue and Columbia road..... | | |
| 3096 | Thirtieth and P streets nw..... | | |
| 3097 | Both sides of Sixth street sw., between D and E streets..... | 82.00 | 347.31 |
| 3099 | Both sides of F street ne., from east line of Terminal to Third street..... | | |
| 3100 | East and west alley square 100..... | 15.00 | |
| 3102 | North and south alley square 3068..... | | |
| 3124 | Alley square 164..... | 42.00 | |
| 3143 | Both sides Bates street nw., between First and Third streets..... | | |
| 3147 | Both sides of Connecticut avenue, between Wyoming and Calvert streets..... | | |
| 3236 | West side of Fourteenth street nw., between Thomas circle and N street..... | | |
| 3104 | Both sides of I street ne., between Third and Sixth streets..... | | |
| 3062 | Alley square 1075..... | 2,277.00 | |
| 3069 | South side of P street nw., from Thirty-sixth street east to alley..... | | 175.34 |
| 3085 | Alleys in square 552..... | 456.00 | |
| 3126 | Alleys in square 3127..... | 592.00 | |
| 3129 | North side of E street nw., between Eighth and Ninth streets..... | | 520.53 |
| 3135 | East side Fourteenth street nw., between H and I streets..... | | 465.54 |
| 3142 | South side of E street nw., between Seventh and Ninth streets..... | | 653.40 |
| 3148 | North side of K street nw., between Seventh and Ninth streets..... | | 479.22 |
| 3149 | Both sides Third street nw., between H and I streets..... | | 1,457.33 |
| 3150 | North side of K street nw., from Sixth to Seventh street..... | | 551.42 |
| 3151 | North side of L street and Massachusetts avenue nw., between Eleventh and Twelfth streets..... | | 351.93 |

ment, 1908—Continued.

| Curb reset. | Curb set. | | | Vitrified block paved. | Asphalt block paved. | Cobble. | Brick side- walk repaved. | Cost. |
|-------------|-----------|----------|----------|------------------------------|----------------------------|----------|---------------------------------|------------|
| | 6 by 20. | 8 by 8. | Old. | | | | | |
| Lin. ft. | Lin. ft. | Lin. ft. | Lin. ft. | Sq. yds. | Sq. yds. | Sq. yds. | Sq. yds. | |
| | | | | 548.00 | | | | \$1,160.27 |
| | | | | 134.00 | | | | 720.88 |
| | | | | | | | | 2,230.56 |
| | | | | | | | | 438.36 |
| | | | | | | | | 199.51 |
| | 748.84 | | | | | | | 1,136.88 |
| | 94.54 | | 257.88 | | | | | 514.29 |
| | | | | 2,585.00 | | | | 5,180.66 |
| | | 4,295.43 | | | | | | 6,825.06 |
| | 3,364.00 | | | | | | | 4,988.47 |
| | | | | 158.00 | | | | 128.08 |
| | | | 405.71 | | | | | 438.19 |
| | 24.13 | | 630.00 | | | | | 612.27 |
| | | | | 112.00 | | | | 959.50 |
| 26.00 | | | 9.42 | 522.50 | | | 7.50 | 201.19 |
| | | | | 1,585.00 | | | | 966.45 |
| | | 14.13 | | | 1,010.00 | | | 3,303.33 |
| | | | | 1,602.00 | | | | 2,244.39 |
| | 359.58 | | 78.32 | | | | | 2,841.50 |
| | | | | 1,134.00 | | | | 309.78 |
| | | | | | | | | 570.08 |
| | 11.92 | | 178.75 | | | | | 3,456.58 |
| | | | | | | | | 1,039.99 |
| | | | | | | | | 95.48 |
| 448.00 | | | | | | | | 259.63 |
| | | | | | | | | 2,825.38 |
| | | 348.86 | | | | | | 81.77 |
| | | | | | | | | 601.43 |
| 36.20 | | | | | | | | 156.86 |
| 623.38 | | | 224.14 | | | | | 1,496.69 |
| | | | | | | | | 922.84 |
| | | 195.52 | | | | | | 257.68 |
| 58.00 | 151.88 | | | | | | | 537.31 |
| | | | | | | | | 495.85 |
| | | 986.90 | | | | | | 1,216.92 |
| | | 660.47 | | | | | | 808.58 |
| 2,461.00 | 54.43 | | | 513.00 | | | | 3,139.95 |
| | | 1,770.77 | | | | | | 1,158.09 |
| | | | | | | | | 4,390.64 |
| | | | | | | | | 580.49 |
| 11.51 | | | | 987.00 | | | | 82.60 |
| 42.24 | 362.37 | | 8.52 | | | | | 3,327.50 |
| | | | | | | | | 537.49 |
| | 176.45 | | | | | | | 275.24 |
| 9.08 | | 264.63 | | | | | | 642.23 |
| 21.45 | | 1,065.08 | | | | | | 2,587.27 |
| | | | | | | | | 1,787.08 |
| 19.55 | | 244.00 | 51.85 | | | | | 328.15 |
| | | | | | | | | 31.93 |
| 10.00 | | 810.68 | | | | | | 430.23 |
| | | | | | | | | 1,033.65 |
| 18.02 | 3.40 | | 8.20 | 5.33 | 190.00 | | 3.00 | 394.62 |
| | | | | 547.00 | | | | 1,328.28 |
| | | | | 102.00 | | | | 196.15 |
| | 617.50 | | | | | | | 841.19 |
| | | 2,112.33 | | | | | | 3,336.58 |
| | | 119.09 | | | | | | 163.13 |
| | 1,628.10 | | | | | | | 2,323.24 |
| | 61.42 | | | 1,976.00 | | | 13.00 | 4,195.21 |
| 150.00 | | | | | | | | 121.14 |
| | | | | 719.00 | | | | 1,318.59 |
| | | | | 1,518.00 | | | | 2,938.96 |
| 5.80 | | 256.33 | | | | | | 927.03 |
| 51.00 | | 300.54 | | | | | | 930.73 |
| 5.50 | | 462.34 | | | | | | 1,340.85 |
| | | | | | | | | 547.16 |
| 705.62 | 28.26 | 799.60 | | | | | | 2,893.87 |
| 435.70 | 9.42 | | | | | | | 726.32 |
| | | | | | | | | |
| 9.26 | | 242.85 | | | | | | 711.96 |

TABLE K.—Assess

| Job No. | Location. | Grading. | Cement sidewalk. |
|---------|--|-----------------|------------------|
| | | <i>Cu. yds.</i> | <i>Sq. yds.</i> |
| 3154 | South side of I street nw., from Tenth to Eleventh street | | 178.05 |
| 3155 | South side of I street nw., from Sixth to Seventh street | | 554.17 |
| 3156 | South side of I street nw., from Eighth to Ninth street | | 275.50 |
| 3157 | West side Twelfth street nw., from Massachusetts avenue to I street | | 877.70 |
| 3158 | East side Twelfth street nw., from K to L street | | 362.40 |
| 3159 | Both sides Twelfth street nw., from G to New York avenue | | 1,009.16 |
| 3185 | North side of L street nw., from Fifth to Sixth street | | 201.49 |
| 3186 | North side of M street nw., from Fourth to Fifth street | | 824.09 |
| 3191 | West side Sixth street nw., from N to M street | | 553.24 |
| 3190 | Both sides Sixth street nw., from N to O street | | 932.05 |
| 3214 | West side Fifth street nw., from L to M street | | 59.12 |
| 3222 | East side Fifteenth street nw., from I to K street | | 232.62 |
| 3009 | Alley, square 252 | 85.00 | |
| 3023 | Alley, square 1053 | 79.00 | |
| 3024 | Alley, square 2841 | 621.00 | |
| 3038 | Alley, square 116 | 422.00 | |
| 3041 | B street ne., between Eleventh and Twelfth streets, both sides | | 637.89 |
| 3050 | Alley, square 127 | 210.00 | |
| 3051 | Alley, square 3509 | 203.00 | |
| 3058 | Both sides Newark street from Highland place to Thirty-third street | 720.00 | |
| 3060 | Both sides Lincoln road ne., from R to T street | | |
| 3064 | East side Ninth street ne., between G and H streets | | 392.80 |
| 3065 | East side First street nw., between Randolph place and S street | | 203.73 |
| 3079 | East side Four-and-a-half street sw., between E and F streets | | 332.01 |
| 3081 | North side Garfield street nw., between Connecticut avenue and Twenty-seventh street | | 112.83 |
| 3082 | Both sides B street ne., between Tenth and Eleventh streets | | 534.21 |
| 3083 | Both sides B street ne., between Twelfth and Thirteenth streets | | 767.93 |
| 3084 | East side Fifteenth street se., between C street and Massachusetts avenue | | 444.98 |
| 3086 | Alley, square 1005 | 187.00 | |
| 3092 | Both sides Ivy street se., square 693 | | 774.41 |
| 3097 | Both sides Sixth street sw., between D and E streets | 82.00 | 347.31 |
| 3101 | Alleys, square 1015 | 1,051.00 | |
| 3106 | South side H street ne., between Twelfth and Fifteenth streets | | 1,250.80 |
| 3107 | North side H street ne., between Twelfth and Fifteenth streets | | 1,016.85 |
| 3110 | Alley, square 57 | 186.00 | |
| 3111 | North side Kenyon street nw., east from Brightwood avenue | | 112.26 |
| 3112 | Alley, square 2832 | 97.00 | |
| 3121 | West side Second street nw., between T and Elm streets | 98.00 | 323.27 |
| 3125 | South side Columbia road, between Champlain avenue and Ontario road | | 60.71 |
| 3137 | South side Adams street, between First and North Capitol streets, and north side of V street, between North Capitol and First street | | |
| 3149 | Both sides Third street nw., from H to K street | | 1,457.33 |
| 3161 | Both sides Tenth street nw., from O street to Rhode Island avenue | | 1,567.56 |
| 3162 | East side Twelfth street nw., from N to P street | | 327.07 |
| 3163 | East side Twelfth street nw., from O street to Vermont avenue | | 868.07 |
| 3165 | Both sides F street nw., from Third to Fourth street | | |
| 3168 | Both sides Tenth street nw., from Rhode Island avenue to S street | | 2,044.67 |
| 3169 | Both sides Fifth street nw., from O to R street | | 998.08 |
| 3170 | Both sides N street nw., between Sixth and Ninth streets | | 469.27 |
| 3171 | Both sides Eighth street nw., from L to M street | | 1,061.87 |
| 3174 | West side Twelfth street ne., between H and I streets | | 356.68 |
| 3178 | West side Ninth street nw., between P and Q streets | | 534.27 |
| 3179 | South side F street sw., between Eighth and Ninth streets | | 218.02 |
| 3189 | Both sides Eighth street nw., from O to P street | | 737.19 |
| 3192 | North side R street nw., from Tenth to Eleventh streets | | 275.36 |
| 3195 | West side Eighth street nw., M to O streets | | 412.03 |
| 3196 | East side Eighth street nw., M to N streets | | 580.07 |
| 3199 | East side Sixth street nw., Q to R streets | | 516.30 |
| 3203 | South side R street nw., Ninth to Tenth streets | | 470.73 |
| 3206 | South side Sixth street nw., P to Q streets | | 516.81 |
| 3218 | Both sides F street sw., Sixth to Seventh streets | | 888.35 |
| 3220 | Both sides F street nw., Second to Third streets | | |
| 3235 | East side Fourth street nw., E to G streets | | |
| 3237 | North side S street ne., between North Capitol street and Lincoln avenue | | 143.72 |
| 3273 | Both sides Euclid street nw., between Champlain avenue and Columbia road | | 210.16 |
| 3274 | Both sides Vermont avenue nw., from S to T streets | | 573.26 |
| 3276 | West side Sixth street ne., from I to K streets | | 265.28 |
| 3277 | East side Fifth street ne., from I to K streets | | 267.61 |
| 3280 | Both sides P street nw., from Fifth to Ninth streets | | 1,560.18 |
| 3284 | Alley, square 3124 | 418.00 | |
| 3285 | Alley, square 973 | | |
| 3286 | Alley, square 93 | 45.00 | |
| 3289 | Both sides Tenth street nw., between New York and Massachusetts avenues | | 1,158.24 |
| 3290 | North side L street and New York avenue, between Fourth and Fifth streets | | 1,085.72 |
| 3295 | East side Flagler place nw., between U and V streets | | 65.33 |
| 3297 | Alley, square 311 | 106.00 | |
| 3327 | Eleventh street nw., at Spring road | 48.00 | |
| | Total | 17,743.40 | 65,268.12 |

ment, 1908—Continued.

| Curb reset. | Curb set. | | | Vitrified block paved. | Asphalt block paved. | Cobble. | Brick side- walk repaved. | Cost |
|-----------------|-----------------|-----------------|-----------------|------------------------------|----------------------------|-----------------|---------------------------------|------------|
| | 6 by 20. | 8 by 8. | Old. | | | | | |
| <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | |
| 140.00 | | | | | | | | \$236.87 |
| 518.40 | 9.42 | | | | | | | 746.19 |
| 19.55 | | 258.71 | | | | | | 654.20 |
| 897.68 | 18.84 | | | | | | | 1,203.44 |
| 371.83 | | | | | | | | 517.43 |
| 76.05 | | 1,301.87 | | | | | | 2,853.67 |
| | | | | | | | | 226.34 |
| 757.90 | 14.07 | | | | | | | 1,134.47 |
| 536.80 | 9.42 | | | | | | | 763.73 |
| 889.34 | 9.42 | | | | | | | 1,253.11 |
| | | | | | | | | 73.24 |
| 35.60 | | 351.52 | | | | | | 733.80 |
| | | | | 354.00 | | | | 729.59 |
| | | | | 326.00 | | | | 592.64 |
| | | | | 813.00 | | | | 1,877.94 |
| 52.00 | 9.42 | | | | 1,680.00 | | | 3,719.63 |
| | | | | 1,340.00 | | | | 709.51 |
| | | | | 604.50 | | | | 2,748.48 |
| 85.00 | 1,644.01 | 1,792.55 | 265.58 | | | | | 1,346.46 |
| | | 10.02 | | | | | | 2,766.69 |
| | | | | | | | | 2,477.67 |
| 214.00 | | | | | | | | 447.47 |
| 323.17 | | | | | | | | 272.97 |
| | | | | | | | | 453.54 |
| 189.68 | | | | | | | | 204.27 |
| 8.00 | | | | | | | | 591.06 |
| | 613.86 | | | | | | | 853.82 |
| 25.00 | 9.42 | | | 425.00 | | | 10.00 | 1,315.61 |
| | | | | | | | | 925.66 |
| 10.00 | | | | | | | | 853.78 |
| 136.36 | 9.42 | | | 837.00 | | 8.00 | | 430.23 |
| 1,140.20 | | | | | | | | 1,821.58 |
| 40.14 | | 970.61 | | | | | | 2,333.32 |
| | | | | | 170.00 | | | 3,859.34 |
| 22.10 | 165.32 | | | | 160.00 | | | 568.48 |
| | | 209.72 | | | | | | 377.19 |
| | | | | | | | | 390.48 |
| | | | | | | | | 677.36 |
| | | | | | | | | 75.22 |
| | | | 1,574.91 | 4.00 | | 18.00 | | 298.57 |
| 705.62 | 28.26 | 799.00 | | | | | | 2,883.87 |
| | | | | | | | | 1,741.76 |
| 424.50 | | | | | | | | 480.60 |
| 167.30 | | | | | | | | 1,026.51 |
| | | 486.47 | | | | | | 613.38 |
| | | 981.02 | | | | | | 2,287.68 |
| | | | | | | | | 1,485.92 |
| | | | | | | | | 498.73 |
| 917.80 | | | 50.00 | | | | | 1,436.73 |
| 338.00 | | | | | | | | 478.60 |
| 476.15 | 10.30 | | | | | | | 736.23 |
| | | 274.24 | | | | | | 611.05 |
| | | 701.75 | | | | | | 1,743.71 |
| | | 264.64 | | | | | | 660.84 |
| 413.70 | 9.42 | | 36.00 | | | | | 593.60 |
| 537.60 | | | | | | | | 776.99 |
| | | 517.32 | | | | | | 1,251.34 |
| 15.71 | | 526.02 | | | | | | 1,229.61 |
| 478.00 | | | 23.42 | | | | | 711.06 |
| 1,001.38 | | | 75.00 | | | | | 1,273.38 |
| 26.80 | | 762.13 | | | | | | 977.90 |
| 5.00 | | 751.16 | | | | | | 942.85 |
| 41.50 | | 177.90 | | | | | | 433.40 |
| 10.00 | | | | | | | | 266.91 |
| | | | | | | | | 634.11 |
| | 28.42 | | | | | | | 343.58 |
| | 27.27 | | | | | | | 346.41 |
| 100.00 | | | | | | | | 1,745.99 |
| | | | | 1,077.00 | | | | 2,038.58 |
| | | | | 216.00 | | | | 372.51 |
| | | | | 438.00 | | 46.00 | | 874.97 |
| 39.69 | 9.64 | 1,218.22 | | | | | | 2,921.65 |
| | | | | | | | | 1,207.10 |
| | | | | 217.00 | | | | 80.94 |
| | | | | | | | | 554.96 |
| | | | | | | 137.00 | 82.00 | 232.75 |
| 25,702.51 | 15,848.49 | 42,231.95 | 3,982.70 | 22,367.33 | 3,210.00 | 209.00 | 197.50 | 244,174.29 |

TABLE L.—Sidewalks and curbs, 1908.

| Job No. | Location. | Cement coping. | Cement sidewalk. | Curb reset. | Curb set. | | Cost. |
|---------|--|-----------------|------------------|-----------------|-----------------|-----------------|-----------|
| | | | | | 8 by 8. | Old. | |
| | | <i>Lin. ft.</i> | <i>Sq. yds.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | |
| 2501 | Reservation 16, Mount Pleasant street, between Irving street and Columbia road | | 279.41 | | 115.59 | | \$349.39 |
| 2503 | Reservation 136, Thirtieth street, side | | 106.54 | | | | 263.34 |
| 2504 | Congress School building, I street sw., side | | 510.65 | | | 75.00 | 571.18 |
| 2513 | Reservation north of Center Market | 105.00 | | | | | 37.86 |
| 2514 | Reservation front of Center Market | | 241.35 | | | | 253.42 |
| 2515 | Roadway through reservation front of Center Market | | 98.21 | 159.10 | | | 139.82 |
| 2516 | Reservation 53, Pennsylvania avenue and G street se. | | 14.51 | | | | 151.55 |
| 2517 | Jones School, se. corner First and L streets nw. | | 36.39 | | | | 38.42 |
| 2523 | Twelfth street nw., between K and L streets, "Thompson School" | | 894.55 | | | | 973.96 |
| 2525 | Thirteen-and-a-half and Fourteenth streets, side new Municipal Building | | | | | | |
| | Total | 105.60 | 2,311.63 | 159.10 | 115.59 | 75.00 | 62,759.14 |

TABLE M.—Miscellaneous work, 1908.

| Job No. | Location. | Appropriation. | Grading. | Cement sidewalk. | Curb set. | | Cobble. | Cost. |
|---------|--|----------------------|-------------------|------------------|-----------------|-----------------|-----------------|------------|
| | | | | | 6 by 20. | 8 by 8. | | |
| | | | <i>Cu. yards.</i> | <i>Sq. yds.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Sq. yds.</i> | |
| 1400 | Twenty-ninth street nw., between K and M streets. | Georgetown schedule. | | | | | | \$6,486.20 |
| 1401 | do. | do. | | | | | | 400.56 |
| 1500 | Baird street nw., between First and Third streets | Northwest schedule. | | | | | 1,200.00 | 4,258.31 |
| 1501 | E street nw., between Eighteenth and Nineteenth streets. | do. | | | | | | 3,121.91 |
| 1502 | do. | do. | | | | | | 188.91 |
| 1601 | C street sw., between B and D streets | Southwest schedule. | 104.00 | | | | 672.00 | 268.26 |
| 1601 | Twelfth street ne., between B and C streets. | do. | 91.00 | 221.00 | | | 1,747.00 | 85.75 |
| 1700 | G street ne., between Ninth street and Maryland avenue. | Northwest schedule. | 250.00 | | | | 450.00 | 549.00 |
| 1701 | do. | do. | | | | | 2,250.00 | |
| 1702 | B street ne., between Eleventh and Thirteenth streets. | do. | | | | | 1,448.00 | 176.78 |
| 1703 | G street ne., between Maryland avenue and Ninth street. | do. | | | | | | 13,211.32 |

| | | | | | | | |
|------|---|--|-------|--|--|----------|----------|
| 1801 | Ninth street se., between K street and Virginia avenue. | Southeast schedule. | | | | | 2,662.39 |
| 1803 | Tenth street se., between I and L streets. |do..... | | | | | 431.50 |
| 1807 | Ninth street se., between K street and Virginia avenue. |do..... | | | | 129.99 | 157.84 |
| 4876 | Albemarle street east of Connecticut avenue. | Grading Albemarle street east of Connecticut avenue. | | | | | 25.50 |
| 4401 | Brookland avenue. | Grading Brookland avenue. | | | | | 370.60 |
| 4426 | Rittenhouse street and Western avenue. | Grading Rittenhouse street and Western avenue. | | | | | 479.20 |
| 4476 | Kenyon street, Sherman avenue to Eleventh street. | Grading and improving Kenyon street. | | | | | 1,759.47 |
| 4501 | Chesapeake street, Brookville road to Grant road. | Grading and improving Chesapeake street. | | | | | 2,598.86 |
| 4576 | Randolph street av., between North Capitol street and First streets. | Pave Randolph street. | | | | 1,572.78 | 2,108.94 |
| 4626 | Seaton place, between First and North Capitol streets. | Pave Seaton place. | | | | 737.87 | 1,094.69 |
| 4651 | Intersection of Sixteenth street and Piney Branch road. | Grading and improving Sixteenth street extended. | | | | | 133.90 |
| 4726 | Nichols avenue and Livingstone road. | Macadamize Nichols avenue and Livingstone road. | | | | | 3,521.51 |
| 4777 | Euclid street, Champlain avenue to Columbia road. | Grading and improving Euclid street. | | | | | 393.36 |
| 4778 | South side of Columbia road and northeast and southeast corner of Euclid street. |do..... | 22.00 | | | | 20.86 |
| 4826 | Shepherd street east of Eighth street. | Grading and improving Shepherd street. | | | | | 2,835.67 |
| 4851 | T street ne., both sides Lincoln road. | Pave T street. | | | | | 242.75 |
| 4901 | Rittenhouse street from Brightwood avenue to Blair road. | Grading and improving Rittenhouse street. | | | | | 1,244.34 |
| 4951 | Eighteenth street from Irving street to Lamont street. | Grading and improving Eighteenth street. | | | | | 20.87 |
| 4952 |do..... |do..... | | | | | 444.84 |
| 5001 | Southwest corner Eleventh street and Irving avenue; northwest corner Eleventh street and Columbia road. | Pave Eleventh street. | 11.50 | | | | 9.61 |
| 5002 | Eleventh street, between Columbia road and Irving street. |do..... | | | | 321.11 | 404.73 |
| 6000 | Adjusting plumbing appurtenances various streets. | Elimination of grade crossings. | | | | | 3,461.32 |
| 6001 | Restoration of surface conditions, vicinity of Plaza. |do..... | | | | | 6,632.33 |
| 6005 | Second street sw., between E street and Virginia avenue. |do..... | | | | | 503.26 |
| 6006 | Fourth street ne., between M street and Florida avenue. |do..... | | | | | 2,327.52 |
| 6008 | Fourteenth street sw., between D and Water streets. |do..... | | | | | 3,205.61 |
| 6009 | Ivy street se., square 693. |do..... | | | | | 1,670.19 |
| 6011 | Virginia avenue sw., between Sixth and Seventh streets. |do..... | | | | | 1,223.17 |

| | | | | | | | | | | |
|------|---|--|----------|--------|--------|-------|----------|----------|-------|------------|
| 1603 | South Capitol street sw., between C and D streets ne., between Seventh and Ninth streets. | Southwest section. | 50.00 | | | | | 320.00 | | 60.75 |
| 1707 | Both sides Wyoming avenue nw. from Twentieth street to Connecticut Avenue Bridge. | Northeast section | 70.00 | | | | | 400.00 | | 96.25 |
| 3601 | Approaches to Connecticut Avenue Bridge. | Connecticut Avenue Bridge, paving approaches. | | | | | | | | 964.26 |
| 3602 | Brookland avenue. | Grade, Brookland avenue. | 500.00 | | | | | | | 1,046.44 |
| 4402 | Newark street, Cleveland Park. | Grading and improving Newark street | | | | | | | | 16.87 |
| 4451 | Lincoln road ne., between T and U streets. | Grading and improving Lincoln road | | | | | | | | 1,619.15 |
| 4526 | do. | do. | | | | | | | | 173.75 |
| 4527 | Both sides Kalorama road, between Eighteenth street and Champlain avenue. | Pave Kalorama road between Eighteenth street and Champlain avenue. | | | | | | | | 2,066.93 |
| 4552 | Eighteenth street and Kalorama road. | do. | | | | | | | | 633.62 |
| 4553 | Rhode Island avenue extended. | do. | | | | | | | | 104.47 |
| 4676 | Fifteenth street from Florida avenue to Euclid street. | Grading and improving Rhode Island avenue east of Brentwood road. | 90.00 | 35.00 | | | | 38.00 | 10.00 | 703.85 |
| 4701 | Fifteenth street from Florida avenue to Euclid street. | Grade Fifteenth street from Florida avenue to Euclid street. | 400.00 | | | | | 150.00 | | 146.01 |
| 4702 | South side of T street ne., between North Capitol street and Lincoln road. | do. | | | | | | | | 1,054.81 |
| 4852 | Cement storehouse, D street sw. | Pave T street ne., between North Capitol street and Lincoln road. | | | 275.77 | | 50.15 | | | 507.70 |
| 6103 | | Cement storehouse with property yard, D street sw. | | | | | | | | 73.25 |
| | Total | | 2,843.00 | 870.73 | 496.77 | 50.15 | 4,300.87 | 9,875.00 | 93.00 | 106,005.99 |

TABLE N.—Whole cost work, 1908.

| Job No. | Location. | For whom done. | Grading. Cu. yds. | Cement sidewalk. Sq. yds. | Curb reset. Lin. ft. | Vitrified block paved. Sq. yds. | Asphalt block paved. Sq. yds. | Cement coping. Lin. ft. | Cost. |
|---------|---|--|----------------------|------------------------------|-------------------------|------------------------------------|----------------------------------|----------------------------|-----------|
| 6002 | Emergency repairs First street tunnel. | Pennsylvania R. R. Co. | | | | | | | \$105.15 |
| 6004 | Seventh street sw. and C and D streets and Virginia avenue. | Capital Traction Co. | | | | | | | 13,869.23 |
| 6010 | South Capitol street, between D and E streets | Philadelphia, Baltimore and Washington R. R. Co. | | | | | | | 2,177.07 |
| 6014 | South side of L street, between terminal and First street. | Union Trust Co. | | | | | | | 422.79 |
| 6019 | Fourteenth street extended | Capital Traction Co. | | | | | | | 7,217.88 |
| 6051 | Parking Virginia avenue, square 464, lots 18-21. | N. Auth Provision Co. | | | | | 195.00 | | 460.88 |
| 6052 | L street ne., between First and Second streets. | Union Trust Co. | 910.00 | | | | | | 455.00 |
| 6066 | South side of Virginia avenue sw., between Sixth and Seventh streets. | J. Schlitz Brewing Co. | | | | | 66.66 | | 177.54 |
| 6068 | Reservation north of Center Market. | Washington Market Co. | | | | | | | 390.00 |
| 6081 | Southeast corner of Thirteenth street and Pennsylvania avenue nw. | Gibson Bros. | | | | 12.00 | | 1,083.33 | 24.62 |
| 6082 | Southwest corner of Thirteenth and C streets nw. | Wm. H. Dyer. | | | | 12.00 | | | 24.62 |
| 6083 | Southeast corner of Thirteenth street and Ohio avenue. | Jos. L. Crupper. | | | | 32.00 | | | 65.64 |
| 6086 | 315 Thirteenth street nw. | A. F. Jones. | | | | 12.00 | | | 24.62 |
| 6087 | Northwest corner of Thirteenth and B streets nw. | W. I. Gallber. | | | | 32.00 | | | 84.84 |
| 6094 | Nichols avenue. | Washington Railway and Electric Co. | | | | | | | 206.00 |
| 6097 | Thirteenth street n.w., between B and Pennsylvania avenue. | Thos. R. Riley. | | | | 32.00 | | | 65.66 |
| 6016 | Rhode Island Avenue Bridge. | Baltimore and Ohio R. R. Co. | | 603.85 | | | | | 3,111.88 |
| | Total | | 910.00 | 603.85 | | 132.00 | 261.66 | 1,083.33 | 28,902.90 |

TABLE O.—Number of square yards and cost charged for repairs to cuts made by plumbers and others in streets, avenues, and alleys during the fiscal year ended June 30, 1908.

Item No. 1 shows the number of cuts repaired for various plumbers.
 Item No. 2 shows the number of cuts repaired and the cost thereof on "whole cost" work, to which 5 per cent is added for tools, clerk hire, etc., for the maintenance of the miscellaneous trust fund deposits, District of Columbia (operating account), which fund is used to pay all accounts for labor, material, tools, etc., used in this class of work, and also includes the work done for gas, electric-light, and telephone companies, which work is charged at other than the flat rates charged to plumbers.
 Item No. 3 shows the number of cuts repaired on account of sewer department and the cost of the same.
 Item No. 4 shows the number of cuts repaired on account of the water department and the cost of the same.
 Item No. 5 shows the number of cuts repaired for the work done on account of other appropriations of the District of Columbia and the cost of the same; also the cost of work charged against retents and appropriations of the General Government.

| | Number. | Square yards. | Cost (amount charged). |
|---|---------|---------------|------------------------|
| Item No. 1.—Plumbers' cuts: | | | |
| Sheet asphalt..... | 348 | 716.20 | \$2,327.65 |
| Granite block..... | 146 | 287.00 | 1,430.50 |
| Asphalt block..... | 216 | 916.60 | 1,324.90 |
| Vitrified block or brick..... | 101 | 204.40 | 511.00 |
| Cobble and rubble..... | 180 | 216.50 | 129.90 |
| Macadam..... | 368 | 213.33 | 213.33 |
| Granolithic walks..... | 604 | 824.01 | 1,854.02 |
| Brick sidewalks..... | 1,021 | 12,415.90 | 6,303.38 |
| | 2,984 | 15,793.94 | 13,094.68 |
| Item No. 2.—Railroad, electric-light company, telephone company, and other corporations and individual depositors, account of whole cost work..... | 2,974 | 46,007.20 | 96,889.52 |
| Item No. 3.—Various appropriations of the sewer department..... | 440 | 5,901.00 | 11,881.32 |
| Item No. 4.—Various appropriations of the water department..... | 1,138 | 10,029.60 | 13,778.16 |
| Item No. 5.—Various appropriations other than the above, including repairs to streets, roads, street lighting, electrical department, improvements and repairs, assessment and permit work, elimination of grade crossings, contingent and miscellaneous expenses, parking commission, etc..... | 622 | 10,626.16 | 14,851.22 |
| Total..... | 8,158 | 88,357.90 | 150,494.90 |

• Includes amount charged for paving brick.

TABLE P.—Grading streets, alleys, and roads, 1908.

| Job No. | Location. | Grading. | Cost. |
|---------|---|-----------------|------------|
| | | <i>Cu. yds.</i> | |
| 1901 | Webster street nw., between Fourteenth and Eighteenth streets..... | 12,450 | \$4,617.74 |
| 1912 | West sidewalk Lincoln road, between U and V streets..... | 1,900 | 468.62 |
| 1914 | C street ne., between Fourteenth and Fifteenth streets..... | 3,393 | 1,077.44 |
| 1921 | Massachusetts avenue se., between Fourteenth and Nineteenth streets..... | 1,684 | 429.62 |
| 1922 | C street se., between Twelfth and Thirteenth streets..... | 6,837 | 985.61 |
| 1925 | Adams street, between North Capitol and First streets..... | 10,562 | 2,181.00 |
| 1926 | Newton street, east of Warder, and Warder street, south of Newton street..... | 1,314 | 217.50 |
| 1927 | Kenyon street, east of Brightwood avenue..... | 777 | 130.00 |
| 1928 | Fifth street nw., between U and V streets..... | 747 | 156.75 |
| 1929 | E street ne., between Twelfth and Thirteenth streets, north side..... | 20 | 6.43 |
| 1930 | Sixteenth street extended, north of Newton street..... | 5,120 | 775.80 |
| | Total..... | 34,804 | 11,046.51 |

REPORT OF THE SURVEYOR, DISTRICT OF COLUMBIA.

WASHINGTON, D. C., *July 25, 1908.*

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ending June 30, 1908:

The total number of orders for the year for surveys and plats was about 2,800, this being slightly less than the number for the previous year.

The number of lots surveyed has been 1,461, against 1,847 for last year, and the number of walls located has been 1,229, against 1,454 for last year.

The number of subdivisions recorded has been 391. This is an increase of nearly 100 over the number for the previous year.

The subdividing and recording of large parcels of land into lots, blocks, streets, etc., has slightly decreased during the past year. Seventeen of these have been made, against 22 for last year.

These large subdivisions have been recorded under the names of—

Chevy Chase, D. C.
First addition to Washington Highlands.
City View Heights.
East Side Park (first subdivision).
East Side Park (second subdivision).
Randle Highlands (fifth subdivision).
Randle Highlands (sixth subdivision).
Dahlgren Terrace.
Saul's Addition—"Maple Grove."

Rhode Island Avenue Terrace.
Hall's Subdivision of part of "The Ridge."
Wisconsin Avenue Park.
Randle Highlands (seventh subdivision).
Cleveland Park.
Richmond Park.
West Woodridge.
Benning Heights.

The following table is submitted as a matter of comparison with a similar one published in last year's report, showing the relative increase or decrease in certain classes of work:

| | Fiscal year 1905-6. | Fiscal year 1906-7. | Fiscal year 1907-8. |
|--|------------------------|------------------------|------------------------|
| FOR PRIVATE PARTIES. | | | |
| Individual lots or parts of lots surveyed in city and county..... | 1,759 | 1,847 | 1,461 |
| Certificates of survey issued covering one or more lots..... | 1,097 | 1,005 | 824 |
| Duplicates of above recorded in survey certificate books..... | 1,097 | 1,005 | 824 |
| Separate surveys made to verify walls..... | 836 | 603 | 560 |
| Individual buildings inspected as to location of new walls..... | 1,652 | 1,454 | 1,229 |
| Walls moved before final certification..... | 940 | 830 | 374 |
| Large tracts in county surveyed, subdivided, and recorded..... | 21 | 22 | 17 |
| Outline surveys in county of unsubdivided tracts..... | 58 | 64 | 57 |
| Subdivision blanks prepared..... | 408 | 358 | 433 |
| Duplicate subdivision blanks prepared for assessor..... | 408 | 358 | 433 |
| Subdivisions recorded..... | 393 | 308 | 391 |
| Total of individual new lots in subdivisions..... | 4,609 | 4,166 | 5,219 |
| Plats of one or more recorded lots to accompany applications for building permits..... | 940 | 929 | 883 |
| Estimates of cost issued in triplicate..... | 3,287 | 2,982 | 2,801 |
| Plats made up on order of private parties..... | 2,932 | 2,736 | 2,647 |
| Total of fees paid to collector of taxes by private parties..... | \$17,706 40 | \$15,102 75 | \$13,040 80 |
| FOR THE DISTRICT OF COLUMBIA. | | | |
| Surveys for the District of Columbia..... | 46 | 63 | 43 |
| Plats recorded..... | 35 | 28 | 56 |
| Indorsements on survey plats..... | 1,097 | 1,005 | 824 |
| Indorsements on wall survey plats..... | 836 | 603 | 560 |
| Postal-card reports concerning walls to owners..... | 836 | 603 | 560 |
| Reports concerning walls to building inspector..... | 899 | 855 | 733 |
| Assessment and taxation plats recorded..... | | (a) | 252 |
| MISCELLANEOUS. | | | |
| Total of surveys for the District of Columbia and private parties.... | 2,058 | 1,817 | 1,501 |
| Total of plats, public and private, including plats drawn in books.. | 4,561 | 4,204 | 4,313 |

^a Four large volumes.

The foregoing table shows a decrease, which has been continuous for three years, in surveys of small lots or parcels of land. The survey of large parcels for subdivision purposes has covered about the same area as of last year, while the number of lots recorded has exceeded any previous year.

This decrease in small surveys is shown by a decrease in the amount of fees paid, all of which is easily attributable to recent business depression.

During the last three months a decided upward move in survey orders indicates much heavier work for the coming year.

In field work four parties have been steadily employed during the seasonable part of the year, two of the parties having charge of the large surveys in the county, the others being engaged in wall surveys and the laying out of small lots. The resurvey of walls, formerly intrusted to one party, has been divided so as to insure quicker results. Whenever orders for private work have fallen below normal, the extra time has been employed in recovering old lines of survey or in marking and monumenting them. There is much need of this last class of work in many of the old subdivisions, and can be carried on from time to time in the future.

In the drafting work, four men have been employed in preparing new subdivisions, certificates of survey, resubdivision of lots, building plats, copies of record, maps for condemnation, duplicates for the assessor, and the recording of new data in the public books. This work is exacting, requiring both speed and accuracy, as well as expert results in drafting. It may be well to call attention to the fact that although these men are proficient draftsmen they probably receive for such class of work less pay than in any other department, each of them receiving less than \$1,000 per year.

During the past year an effort has been made to retire some of the old records and to place accurate copies of them for general use. Many of the old books, such as "C. J. U.," "District No. 1," "Books of original squares," etc., have been copied for a number of years, but have never, until recently, been sufficiently verified. It is the aim of the office to have original books or original loose sheets filed in the vault, so that certified copies may be at hand for the public. Many of the old books have had bad usage, and it has become exceedingly necessary to protect them from further handling.

Another matter of pressing need is a set of maps by squares, drawn on a large scale, and showing the very latest subdivisions of lots. This idea has been mentioned several times in former reports, but it has only been during the past few months that any beginning has been made. The set of lithograph maps of city squares have been corrected to a recent date, and several hundred squares of the county have been platted to a scale of 50 feet to the inch, each square on a separate sheet and in size for book binding. These sheets will all contain references to original records, and will in a measure serve as an index in place of cards. This in turn suggests a rearrangement of the present card system, which is somewhat cumbersome and extravagant, and which can with advantage be curtailed so as not to cover so many cards or consume so much space.

The system of street nomenclature for the entire District was made complete by the recording on page 17 of Book County 24, June 15, 1908, of a plan of street names for the section of the District south of the Eastern Branch. Most of this nomenclature has been placed on the original records of the office, and in connection with this it seems necessary that all square numbers adopted under the act for designating parcels of land be likewise recorded or added to the original maps. It is believed, however, that this last change would require additional legislation by Congress.

It has been nearly two years since the maps to designate parcels of land for the purposes of assessment and taxation were placed on record, and the results obtained from this radical change have been of such great benefit that the same class of work should be extended so as to include city squares. The act of February 23, 1905, provided only for designations outside of Washington, but an act of the same nature, approved March 3, 1899, covers the city as well as the county. This last-mentioned act has never been operative, through lack of an appropriation, and it is earnestly recommended that an effort be made to obtain funds for the platting and recording of city squares, so as to distinctively designate all lots or parcels of land over the entire District.

I have had charge of work in the surveyor's office during the last three and one-half years, and this date marks the ending of my duties and the severance of my official relations. During these years the force under me has worked in cramped quarters and under conditions of great disadvantage, but have nevertheless done faithful and efficient duty. The present quarters of the office are well suited to the work, and the force capable and industrious, so that I give up this labor and these associates with great reluctance at this time.

Very respectfully,

WM. P. RICHARDS.

Surveyor, District of Columbia.

Capt. EDWARD M. MARKHAM,

Corps of Engineers, U. S. Army,

Assistant to Engineer Commissioner, District of Columbia.

REPORT OF SUPERINTENDENT OF TREES AND PARKING.

WASHINGTON, D. C., *September 17, 1908.*

SIR: I have the honor to submit herewith my twenty-third annual report, covering the operations of this office during the fiscal year ended June 30, 1908.

Three thousand three hundred and twenty-nine young trees were planted on the streets, avenues, and roads of the District during the fiscal year, a net increase of 755 over the number planted the previous year. The varieties used consisted of the following:

| | | | |
|---------------------|-----|----------------------|-----|
| Elms..... | 353 | Maples, sugar..... | 275 |
| Gingkos..... | 104 | Oaks, pin..... | 848 |
| Lindens..... | 291 | Oaks, pyramidal..... | 16 |
| Maples, Norway..... | 637 | Oaks, red..... | 6 |
| Maples, silver..... | 352 | Sycamores..... | 447 |

The planting was distributed among the seasons as follows:

| | |
|-------------|-------|
| Fall..... | 1,730 |
| Spring..... | 1,599 |

A number of the trees planted were for the purpose of filling vacancies in existing rows, but the large majority were used in extending the lines into the suburbs and hitherto unplanted localities. Of the pin oaks set out, 431 were planted on Fourteenth street NW. extended, between Park road and Piney Branch road, of which only 6 have died, and these have since been replaced. Another large item of planting which has been notably successful was that on Massachusetts avenue NW. extended; here 211 lindens were planted and are growing beautifully. Chevy Chase also received a large share of young trees, elms, Norway maples, sugar maples, and pin oaks being the kinds used in this section. The work of preparing tree spaces for planting is vigorously prosecuted through such portions of the year as it is found practicable to so distribute the force. As a rule, however, no holes are dug between May 1 and August 1, the men being employed in cultivating young trees, mowing weeds, etc. Large quantities of soil stored at various points in the city make it practicable to handle this material at a minimum cost.

The work of transplanting seedlings to nursery rows was steadily carried forward during the past spring. A total of 3,500, consisting of elms, sugar maples, silver maples, oriental planes, tulip poplars, gingkos, and lindens were so transplanted. In connection with this nursery work attention is invited to the fact that both of the nurseries now used by this division are situated on borrowed ground. The E street plat occupies a portion of the Washington Asylum grounds and the Georgia avenue nursery is on land purchased for the Municipal Hospital. The departments originally controlling each of these tracts are continually requesting the relinquishment of their ground, and with each recurring suggestion the possibility of a grave situation is presented, which serves to emphasize the urgent need of acquiring ground for the establishment of a permanent nursery. Both nurseries are at present fully stocked with valuable trees, and an enforced abandonment of either would mean the destruction of growths which could not be replaced within twelve years. In the estimates for the fiscal year 1910 this matter is given attention, and it is earnestly hoped that the Commissioners will view the subject in the light in which it is therein presented.

The general trimming of trees was continued westwardly from North Capitol street, between the Mall and the northern limit of regular lines (at Brightwood and Takoma Park), to Twenty-second street west. All trees, both curb and parking, in this territory received proper attention, and I would add that many of those reached by the trimmers during the year are again in need of this attention. This serves to emphasize the necessity of what I have repeatedly recommended in past years, viz, that a sum be appropriated sufficient to permit the trimming of all the larger trees once each year. Only through this can it be hoped to keep them in good condition. In response to many individual requests, much work of this class was accomplished in localities not embraced within the systematic trimming area. Men are engaged on this work, as on the removal of trees, throughout the entire year, except during bitter cold or rainy weather, or when the ground is covered with snow. Silver maples on the city streets now number about 18,000. When street planting was first undertaken here, these trees were set out largely in excess of other varieties, and in the central sections, where they are in the majority, unavoidable cutting of roots is annually causing many deaths. Several thousand of the more inferior ones should be removed in the near future and replaced with better kinds, and a large number should be "topped," the usual treatment to offset the effects of root mutilation. This topping of trees is unpopular and many protests are registered against it, but experience has

shown that it is the only practical treatment. To remove and top these trees will cost about \$15,000, to say nothing of the cost of the trimming of the other varieties. The police department reported a large number of casualties, which in all cases were given immediate attention. I wish to state here that the office has never been so well equipped for the handling of this class of work as it is at present.

Trees removed aggregated a total of 2,042, and included 44 separate varieties. Of these, 1,763 were curb growths, part of permanent tree lines; 173 were removed from the parkings, 49 from sidewalks, 42 from public alleys and unimproved roadways, and 15 from school yards. The removals were due to the following causes and in the proportion named: Dead, decayed, and dangerous 1,111 (a number equal to the total of all trees removed during the previous year). Of these dead, decayed, and dangerous trees removed, 59 were killed by gas and 39 by horses. Street, building, and other improvements caused the removal of 678, of which a total of 229 were removed incident to the elimination of grade crossings. It is gratifying to note that practically no more trees will be destroyed through this agency, as the grade-crossing work is nearly completed. The balance of trees were removed on account of their being inferior or because of the density of shade.

Statement showing kinds and numbers of trees removed.

| | | | |
|----------------------|-----|-----------------------|-------|
| Acacia..... | 1 | Maples, sycamore..... | 14 |
| Ailanthus..... | 3 | Mulberry..... | 1 |
| Apple..... | 2 | Negundo..... | 122 |
| Apricot..... | 1 | Oak, black..... | 2 |
| Ash..... | 27 | Oak, box..... | 1 |
| Beech..... | 1 | Oak, pin..... | 27 |
| Birch..... | 1 | Oak, pyramidal..... | 26 |
| Catalpa..... | 15 | Oak, red..... | 21 |
| Cedar..... | 5 | Oak, white..... | 12 |
| Cherry..... | 3 | Osage, orange..... | 3 |
| Kentucky coffee..... | 22 | Peach..... | 10 |
| Cypress..... | 1 | Pear..... | 1 |
| Elms..... | 63 | Pine..... | 1 |
| Ginkgo..... | 8 | Poplar, aspen..... | 64 |
| Holly..... | 1 | Poplar, Athenian..... | 37 |
| Horse chestnut..... | 1 | Poplar, Canadian..... | 1 |
| Linden..... | 66 | Poplar, Carolina..... | 230 |
| Locust..... | 26 | Plum..... | 1 |
| Magnolia..... | 1 | Sycamore..... | 287 |
| Maples, Norway..... | 213 | Tulip..... | 11 |
| Maples, red..... | 10 | Willow..... | 3 |
| Maples, silver..... | 601 | | |
| Maples, sugar..... | 95 | Total removals..... | 2,042 |

Comparatively little work was done during the year in connection with wiring trees, only those which stood in exposed locations being wired and then only in exceptional cases.

The results obtained by the inspector in charge of special enforcement of the tree regulations have been very satisfactory, although the fines collected on this account during the year were only slightly above half the sum collected during 1907, falling short of expectations. The total collections amounted to \$256, resulting from 54 arrests, in which deposits of collateral were forfeited to the number of 46 and 8 cases brought to trial and fines imposed. Three cases only were dismissed. It is becoming more and more evident that the citizens are taking precautions to prevent injuring the street trees, the same as they are forced to respect other public properties. The falling off of fine collections is the natural result of vigorous enforcement of the regulations and is the very object sought to be attained.

Contrary to expectations, the destruction of foliage by the June caterpillar pest was of very small moment, and the absence of large numbers of these on the shade trees at that time of year was an unlooked for condition, attributed to the fact that prompt and effective measures have been taken each year for a period of three years back to prevent the spread of the pests. The annual treatment has had the double effect of saving the foliage during the then current fiscal year and of preventing the deposit of larvæ for future breeds. It is evident that the benefit thereof is now being reaped.

My acknowledgments are due for the faithful services of the clerks of this office in their efforts and partial success to put the clerical work and recording devices on a strictly business basis. Card systems have been introduced wherever possible, eliminating the old book records, and card forms are now being prepared for a systematic

count and individual record of every tree on the streets. The last official count, taken some fifteen or twenty years ago, was lacking in important particulars, and it has been found impossible to check changes to show removals and new planting. The proposed count will include all important information, and by daily posting and checking the record will indicate at a glance the status to date of each tree-planted block. It will also eliminate the necessity for making an inspection to determine the condition of each separate block, thus saving much valuable time. While the matter of office is being considered, I wish to state that the present designation of this branch of the service, viz, "Parking commission," is misleading and fails to convey a proper idea of its functions. The old board of three citizens formerly having charge of the trees and styling itself the parking commission has not acted in that capacity for fifteen years, and but two of its members are alive today. It is the opinion of your superintendent of trees and parkings that this branch should be known and designated as the "Division of trees and parkings," thus fixing its status as one of the coordinate branches of the engineer department.

Summary.

| | |
|---|---------|
| Trees on streets at close of fiscal year 1907..... | 92,706 |
| Trees planted fiscal year 1908..... | 3,329 |
| Trees removed from streets, parkings, sidewalks, and school yards fiscal year 1908..... | a 2,000 |
| Net increase of trees..... | 1,329 |
| Trees on streets, in parkings, sidewalks, and school yards at close of fiscal year 1908..... | 94,035 |
| (These figures represent the number of trees which are continuously under the care of this division.) | |
| Number of curb growths at close of 1907..... | 90,852 |
| Net increase of curb trees, 1908..... | 1,566 |
| Number of curb growths at close of 1908..... | 92,418 |
| Mileage of tree-planted streets at close of 1907.....miles.. | 518 |
| Mileage of streets planted in 1908.....do..... | 4½ |
| Mileage of tree-planted streets at close of 1908.....do..... | 522½ |

(EXPLANATION.—A mile of tree-planted street means one mile of roadway planted on both sides with curb trees; there are about 352 trees (2 rows of 176 trees each) in a mile; dividing 352 into 1,566, the net increase of curb growths equals 4½ miles, the increase in mileage of streets planted.)

Expenditures.

| | |
|--|-------------|
| From streets, District of Columbia, 1908, parking commission: | |
| Appropriation for fiscal year..... | \$30,000.00 |
| Total repayments (as shown hereinafter)..... | 4,695.94 |
| Total working fund..... | 34,695.94 |
| Labor, cart, and wagon hire (from pay rolls, special vouchers, etc.): | |
| Office and yard expenses (including \$932.75 for inspector, per diem)..... | \$1,939.00 |
| Care of nurseries, preparing spaces and planting..... | 10,749.20 |
| Street trimming..... | 4,001.90 |
| Removing trees from streets..... | 3,693.50 |
| Care of public parkings, mowing weeds, etc.... | 1,485.25 |
| Wiring trees and removing old wires..... | 332.73 |
| Destruction of insect pests..... | 268.60 |
| Piling soil, hauling manure, etc..... | 735.75 |

a In addition to this number, 42 trees were removed from alleys, unimproved roadways, etc., but did not diminish the number of trees included in the official count.

Labor, cart, and wagon hire, etc.—Continued.

| | |
|---|----------------------|
| Removing old boxes, staking and strapping young trees..... | \$273. 80 |
| Repairing storm damages..... | 113. 25 |
| Gathering seed from street trees..... | 55. 25 |
| Paving around young trees and over holes made vacant by removals..... | 71. 50 |
| Sowing grass seed..... | 36. 50 |
| Removing hedge from public parking..... | 23. 00 |
| Cultivation of young street trees..... | 2, 973. 00 |
| | <u>\$26, 752. 23</u> |

Special services:

| | |
|--|----------------|
| Repair of leak in water pipe at parking commission yard..... | 12. 60 |
| Repair of leak in service pipe on street..... | 2. 17 |
| Plumbing work at yard and at E street nursery..... | 18. 11 |
| Rebuilding 1 typewriter..... | 47. 50 |
| Laundry..... | 4. 56 |
| Hire of bicycles for foremen..... | 56. 97 |
| | <u>141. 91</u> |

Materials, supplies, etc.:

| | |
|---|-------------------|
| Lumber for tree boxes and stakes..... | 3, 485. 39 |
| Lumber (miscellaneous)..... | 99. 95 |
| Leather straps..... | 450. 00 |
| Nails, screws, bolts, etc..... | 232. 69 |
| Soil, grass seed, fertilizer, etc..... | 315. 71 |
| Tools, agricultural implements, etc..... | 310. 98 |
| Fuel..... | 31. 26 |
| Paints, oils, glass, etc..... | 47. 68 |
| Coach findings ^a | 504. 33 |
| Forage..... | 1, 769. 30 |
| Rope..... | 9. 75 |
| Car tickets..... | 20. 00 |
| Ice..... | 9. 36 |
| Stationery, printing, furniture, and office supplies..... | 148. 56 |
| Typewriter..... | 80. 00 |
| Sundries..... | 219. 22 |
| | <u>7, 734. 18</u> |
| Unexpended balance of appropriation..... | 67. 62 |

Total..... 34, 695. 94

Annual salaries expended during the fiscal year 1908, as follows:

| | |
|--|--------------------|
| Superintendent of parking..... | 1, 400. 00 |
| Assistant superintendent of parking..... | 1, 000. 00 |
| Inspector..... | 1, 000. 00 |
| Foreman..... | 1, 050. 00 |
| Four foremen, at \$900 per annum..... | 3, 600. 00 |
| Clerk..... | 750. 00 |
| | <u>8, 800. 03</u> |
| | <u>43, 495. 94</u> |

Statement showing sums expended during the year for purchase or maintenance of horses, harness, and wagons, together with amounts expended for cart and wagon hire.

[These sums are already included in the above detailed statement.]

| | |
|---|---------------------|
| Forage for parking commission horses..... | \$1, 769. 30 |
| Miscellaneous items, including purchase of wagons, harness, and stable supplies, repairs to wagons and harness ^a | 504. 33 |
| | <u>\$2, 273. 63</u> |
| Cart and wagon hire, as follows: | |
| 1,670 days' services of carts, at \$2.25 per day..... | 3, 757. 50 |
| 348½ days' services of wagons, at \$3.50 per day..... | 1, 220. 63 |
| | <u>4, 978. 13</u> |
| | <u>7, 251. 76</u> |

^a In addition to this number, 42 trees were removed from alleys, unimproved roadways, etc., but did not diminish the number of trees included in the official count.

Statement showing sums expended for special employees.

1 inspector employed from August 1, 1907, to June 30, 1908, 287 days, at
 \$3.25 per diem..... \$932.75

Expenditures from various appropriations.

[Exclusive of parking commission.]

| | |
|---|------------|
| Elimination of grade crossings (purchase, etc., of land, grading, etc.): Removing and planting trees, repayments..... | \$1,995.20 |
| Metropolitan police, District of Columbia, 1908: Repairs to stations, repayments..... | 19.80 |
| Miscellaneous trust fund deposits: | |
| Inspection, removing, planting, trimming, transplanting, etc.— | |
| Direct charges..... | \$107.75 |
| Repayments..... | 1,786.82 |
| | 1,894.57 |
| Sewerage pumping station: Planting trees in grounds of above, repayment. | 46.94 |
| Water department, District of Columbia, high-service system: Planting hedges at Reno reservoir, grading, etc., at Brightwood reservoir, direct charges..... | 53.00 |
| Postage fund, District of Columbia; Official correspondence..... | 30.00 |
| Improvements and repairs, District of Columbia, 1908 (assessment and permit work): | |
| Removing trees— | |
| Direct charges..... | \$208.63 |
| Repayments..... | 648.83 |
| | 857.46 |
| Sidewalks and curbs—Removing trees, repayment..... | 17.88 |
| Paving roadways under permit system—Removing trees, repayment.. | 20.08 |
| Grade and improve Euclid street, between Columbia Road and Champlain street—Removing trees, repayment..... | 7.98 |
| Grade and improve Fifteenth street, between Chapin and Euclid streets—Removing trees, repayment..... | 9.08 |
| Grade and improve Lincoln road NE.—Removing trees, repayment.. | 26.68 |
| Repairs to county roads—Removing trees, repayment..... | 1.97 |
| Pave T street from North Capitol street to Lincoln road—Removing trees, repayment..... | 5.25 |
| Pave Kalorama road between Eighteenth and Champlain streets—Removing trees, repayment..... | 5.20 |
| Northeast schedule—Removing trees, direct charge..... | 22.25 |
| Georgetown schedule—Removing tree, repayment..... | 3.30 |
| Repairs to streets—Grading and sodding continuous tree space, repayment..... | 47.85 |
| Paving approaches to Connecticut Avenue Bridge—Removing trees, repayments..... | 53.08 |
| Total | 5,217.57 |

NOTE.—The repayments indicated above are embodied in the table of expenditures from appropriation for parking commission.

Respectfully submitted.

TRUEMAN LANHAM,
Superintendent of Trees and Parkings.

Capt. EDWARD M. MARKHAM,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

REPORT OF THE ASSISTANT ENGINEER IN CHARGE OF STREET EXTENSIONS.

SIR: I have the honor to submit the following report of the operations of the street-extension division during the fiscal year ending June 30, 1908:

So many street-extension measures having been passed by Congress during the previous session, it was impossible to have them all tried by the court.

Twenty-four cases were filed, of which seventeen were tried, fourteen verdicts of which were confirmed; one case, that of T street, not yet completed, and in the case of Albemarle street the first verdict was set aside and a new jury drawn to hear the case in October, and in one case, that of assessing benefits to pay for the purchase of ground necessary to extend W and Adams streets through Prospect Hill Cemetery, the verdict has been filed but not confirmed.

At the preliminary hearing of the case for extension of Second and W streets a decision of the court was rendered, in regard to the date of filing the petition, which also affected the case of widening Columbia road, and the extension of Park place NW.

An appeal from the decision was taken by the District, but has not yet been heard by the court of appeals, and until this latter court renders an opinion, the Columbia road and Park place cases have been discontinued.

The act authorizing the extension of Meridian place was amended so as to allow the Commissioners to change the line of extension. Property owners having dedicated land for the extension, no further action will be taken in the matter.

Reports on the following bills were made at the past session of Congress:

Widening of Benning road from Fifteenth street to Oklahoma avenue.

Extension of Twentieth street NE., Benning road to M street.

Extension of Oak street NW.

Extension of Fifth and Jefferson streets in Petworth.

Extension of Kenyon and Seventeenth streets NW.

Extension of New Hampshire avenue (amendment).

To open a low-grade road along the Anacostia River.

Extension of H street NE.

Extension of Massachusetts avenue from Wisconsin avenue to the District line.

Extension of Hamlin, Fifth, Sixth, and Irving streets NW.

Extension of New York avenue from Fourth street to Bladensburg road.

Extension of Allison street NW.

Extension of Kenyon street NW., Fourteenth street to School street.

To acquire part of lot 4, Rosemount, to widen Twentieth street NW.

To acquire land around Piney Branch Bridge at Sixteenth street.

To acquire Graceland Cemetery as a park.

To acquire land for streets and approaches to south end of Connecticut Avenue Bridge.

To acquire "Montrose" as a park.

To acquire land at Fort Thayer for a park.

To open Rock Creek drive south of Massachusetts avenue.

Proposed change of highway plan east of Mills avenue.

To open a minor street in square 877.

To open a minor street in square 624.

To acquire land on Sixteenth street north of W street for a park.

To acquire land on Pennsylvania avenue SE. for a park.

To acquire land on west side of Sixteenth street north of Blagden Mill road for addition to Rock Creek Park.

To extend P, Volta, Dent, and Q streets NW., from Thirty-fifth street to Foxhall road.

In each of the above cases it was necessary to prepare a map and estimate of the cost of the extension or purchase.

Maps were also prepared showing the proposed changes in the street-car lines in the city, and the land around the Plaza, proposed for a park, also for the dedication of Meridian street NW., and to complete the extension of Rhode Island avenue to the District line, and dedication of Chesapeake street NW.

The arduous task of compiling a complete map of the District of Columbia, showing all public highways and the extensions proposed by the highway plans, and the numbering of squares outside the city limits was undertaken and completed during the past year. This is the most complete map ever prepared in the engineer department, and credit is due to Mr. Anton Karl, of this division, for the months of painstaking labor spent in its preparation.

But one street extension measure was passed during the fiscal year 1908. That was for widening Benning road from Fifteenth street to Oklahoma avenue, conditioned upon the dedication to the District of not less than 50 per cent of the land

Statement showing sums expended for special employees.

1 inspector employed from August 1, 1907, to June 30, 1908, 287 days, at
\$3.25 per diem..... \$932. 75

Expenditures from various appropriations.

[Exclusive of parking commission.]

| | |
|---|-------------|
| Elimination of grade crossings (purchase, etc., of land, grading, etc.): Removing and planting trees, repayments..... | \$1,995. 20 |
| Metropolitan police, District of Columbia, 1908: Repairs to stations, repayments..... | 19. 80 |
| Miscellaneous trust fund deposits: | |
| Inspection, removing, planting, trimming, transplanting, etc.— | |
| Direct charges..... | \$107. 75 |
| Repayments..... | 1,786. 82 |
| | 1,894. 57 |
| Sewerage pumping station: Planting trees in grounds of above, repayment. | 46. 94 |
| Water department, District of Columbia, high-service system: Planting hedges at Reno reservoir, grading, etc., at Brightwood reservoir, direct charges..... | 53. 00 |
| Postage fund, District of Columbia; Official correspondence..... | 30. 00 |
| Improvements and repairs, District of Columbia, 1908 (assessment and permit work): | |
| Removing trees— | |
| Direct charges..... | \$208. 63 |
| Repayments..... | 648. 83 |
| | 857. 46 |
| Sidewalks and curbs—Removing trees, repayment..... | 17. 88 |
| Paving roadways under permit system—Removing trees, repayment.. | 20. 08 |
| Grade and improve Euclid street, between Columbia Road and Champlain street—Removing trees, repayment..... | 7. 98 |
| Grade and improve Fifteenth street, between Chapin and Euclid streets—Removing trees, repayment..... | 9. 08 |
| Grade and improve Lincoln road NE.—Removing trees, repayment.. | 26. 68 |
| Repairs to county roads—Removing trees, repayment..... | 1. 97 |
| Pave T street from North Capitol street to Lincoln road—Removing trees, repayment..... | 5. 25 |
| Pave Kalorama road between Eighteenth and Champlain streets—Removing trees, repayment..... | 5. 20 |
| Northeast schedule—Removing trees, direct charge..... | 22. 25 |
| Georgetown schedule—Removing tree, repayment..... | 3. 30 |
| Repairs to streets—Grading and sodding continuous tree space, repayment..... | 47. 85 |
| Paving approaches to Connecticut Avenue Bridge—Removing trees, repayments..... | 53. 08 |
| Total | 5,217. 57 |

NOTE.—The repayments indicated above are embodied in the table of expenditures from appropriation for parking commission.

Respectfully submitted.

TRUEMAN LANHAM,
Superintendent of Trees and Parkings.

Capt. EDWARD M. MARKHAM,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

REPORT OF THE ASSISTANT ENGINEER IN CHARGE OF STREET EXTENSIONS.

SIR: I have the honor to submit the following report of the operations of the street-extension division during the fiscal year ending June 30, 1908:

So many street-extension measures having been passed by Congress during the previous session, it was impossible to have them all tried by the court.

Twenty-four cases were filed, of which seventeen were tried, fourteen verdicts of which were confirmed; one case, that of T street, not yet completed, and in the case of Albemarle street the first verdict was set aside and a new jury drawn to hear the case in October, and in one case, that of assessing benefits to pay for the purchase of ground necessary to extend W and Adams streets through Prospect Hill Cemetery, the verdict has been filed but not confirmed.

At the preliminary hearing of the case for extension of Second and W streets a decision of the court was rendered, in regard to the date of filing the petition, which also affected the case of widening Columbia road, and the extension of Park place NW.

An appeal from the decision was taken by the District, but has not yet been heard by the court of appeals, and until this latter court renders an opinion, the Columbia road and Park place cases have been discontinued.

The act authorizing the extension of Meridian place was amended so as to allow the Commissioners to change the line of extension. Property owners having dedicated land for the extension, no further action will be taken in the matter.

Reports on the following bills were made at the past session of Congress:

Widening of Benning road from Fifteenth street to Oklahoma avenue.

Extension of Twentieth street NE., Benning road to M street.

Extension of Oak street NW.

Extension of Fifth and Jefferson streets in Petworth.

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Extension of New York avenue from Fourth street to Bladensburg road.

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To acquire part of lot 4, Rosemount, to widen Twentieth street NW.

To acquire land around Piney Branch Bridge at Sixteenth street.

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In each of the above cases it was necessary to prepare a map and estimate of the cost of the extension or purchase.

Maps were also prepared showing the proposed changes in the street-car lines in the city, and the land around the Plaza, proposed for a park, also for the dedication of Meridian street NW., and to complete the extension of Rhode Island avenue to the District line, and dedication of Chesapeake street NW.

The arduous task of compiling a complete map of the District of Columbia, showing all public highways and the extensions proposed by the highway plans, and the numbering of squares outside the city limits was undertaken and completed during the past year. This is the most complete map ever prepared in the engineer department, and credit is due to Mr. Anton Karl, of this division, for the months of painstaking labor spent in its preparation.

But one street extension measure was passed during the fiscal year 1908. That was for widening Benning road from Fifteenth street to Oklahoma avenue, conditioned upon the dedication to the District of not less than 50 per cent of the land

necessary. As the required amount of land has not been dedicated, no action toward its condemnation has been taken.

Eleven alley condemnation cases were filed, nine of which have been confirmed, one is waiting confirmation, and one has not yet been acted on.

The following properties were purchased through this office:

| | |
|---|------------|
| For police station in Anacostia..... | \$3,000.00 |
| For school in eighth division, square 1038..... | 14,110.00 |
| For school in first division, block 15 Meridian Hill..... | 40,000.00 |
| For addition to Emery School site..... | 4,800.00 |
| For school, Howard University subdivision, block 17..... | 23,345.00 |

The accompanying table shows what condemnation cases were filed and the action taken in each case.

Very respectfully,

E. M. TALCOTT,

Assistant Engineer in Charge of Street Extensions.

Capt. EDWARD M. MARKHAM,

Corps of Engineers, U. S. A.,

Assistant to the Engineer Commissioner, District of Columbia.

Condemnation proceedings filed during the fiscal year 1908.

STREET EXTENSIONS.

| Subject. | Court docket No. | No. of act. | Act approved. | Case filed. | Award. | | Action taken. |
|--|------------------|-------------|---------------|---------------|-------------|------------|---|
| | | | | | Damages. | Benefits. | |
| Widening Columbia road east of Sixteenth street. | 711 | 6 | Jan. 9, 1907 | Feb. 8, 1907 | | | Motion to dismiss case, Jan. 23, 1908. |
| Second street n.w., from Elm street to Bryant, and W street n.w., from Flagler place west to Second street, and eastward to Second street. | 712 | 7 |do..... | May 28, 1908 | | | Dismissed Dec. 16, 1907; to be retried. |
| Meridian place n.w., eastwardly to Fourteenth street. | 713 | 8 |do..... | Feb. 8, 1907 | \$759.70 | \$1,132.58 | Dedication recorded. |
| Fourth street ne. through the Rose tract. | 714 | 30 | Jan. 22, 1907 | Feb. 20, 1907 | 11,255.00 | 11,633.92 | No action taken. |
| Kenyon street n.w., Seventeenth to Mount Pleasant street. | 715 | 28 |do..... | Feb. 21, 1907 | 6,548.10 | 6,948.30 | Confirmed June 10, 1908. |
| Twenty-third street n.w. to Kalorama road. | 717 | 10 | Jan. 9, 1907 | Mar. 7, 1907 | 2,381.18 | 2,735.25 | Confirmed May 24, 1908. |
| Sixth, Seventh, Franklin, and Irving streets, Brookland. | 718 | 5 |do..... | Mar. 9, 1907 | 9,329.21 | 9,745.25 | Confirmed Dec. 26, 1908. |
| Macomb street n.w., west of Cleveland Park. | 720 | 23 | Jan. 21, 1907 | Mar. 31, 1907 | 6,889.33 | 7,303.69 | Confirmed May 26, 1908. |
| Twenty-third street n.w., west of Sixteenth street. | 721 | 24 | Jan. 22, 1907 | Mar. 29, 1907 | 5,574.08 | 5,931.50 | Confirmed Feb. 4, 1908. |
| Harvard street n.w., west of Sixteenth street. | 722 | 144 |do..... | Mar. 29, 1907 | 18,834.83 | 19,220.50 | Confirmed July 11, 1907. |
| Waterside drive n.w., Wisconsin to Bluff road. | 723 | 26 |do..... | Mar. 29, 1907 | 3,511.03 | 3,904.00 | Confirmed Aug. 1, 1907. |
| Waterside drive n.w., west of Twenty-third street. | 725 | 70 | Feb. 8, 1907 | Apr. 8, 1907 | 14,581.50 | 300.00 | Confirmed June 10, 1908. |
| School street n.w., north of Irving street. | 726 | 9 | Jan. 9, 1907 | Apr. 9, 1907 | { 12,913.25 | { 2,645.30 | Confirmed in part Jan. 29, 1908. |
| Genesee place and Summit place in Lanier Heights. | 727 | 302 | June 27, 1906 | Apr. 11, 1907 | 2,179.40 | 2,645.30 | Finally confirmed June 10, 1908. |
| Monroe street, Anacostia, D. C. | 728 | 131 | Feb. 26, 1907 | Apr. 24, 1907 | 474.00 | 797.08 | Confirmed Mar. 13, 1908. |
| Forty-sixth and Warren streets n.w. | 729 | 136 | Feb. 27, 1907 | Apr. 27, 1907 | 13,245.18 | 13,858.00 | Verdict not yet rendered. |
| T street n.w., Rock Creek drive to Thirty-fifth street. | 730 | 144 |do..... |do..... | 7,634.55 | 8,130.23 | Confirmed Jan. 22, 1908. |
| Forty-fifth street n.w. to Nebraska avenue. | 731 | 183 | Mar. 2, 1907 | Apr. 30, 1907 | | | Confirmed Mar. 4, 1908. |
| Monroe street n.w., Seventh street to Michigan avenue. | 732 | 219 |do..... |do..... | | | Confirmed Oct. 7, 1907. |
| Mills avenue ne., Rhode Island avenue to Twenty-fourth street. | 733 | 190 |do..... | May 7, 1907 | | | Verdict set aside May 8, 1908; new jury |
| Albemarle street n.w., Wisconsin avenue to Murdock Mill road. | 737 | 143 | Feb. 27, 1907 | May 27, 1907 | | | Case not yet tried. |
| New Hampshire avenue, Betworth to District line. | 739 | 152 | Mar. 1, 1907 | May 31, 1907 | | | Dismissed May 15, 1908. |
| Pratt street n.w., Rock Creek Church road. | 766 | 4 | Jan. 9, 1907 | Mar. 18, 1908 | | | Case not yet tried. |
| Bladenburg road, Maryland avenue to District line. | 769 | 147 | Feb. 28, 1907 | Mar. 16, 1908 | | | Verdict not rendered. |
| W and Adams streets, west of North Capitol street. | | | | | | | |

Condemnation proceedings filed during the fiscal year 1908—Continued.

ALLEYS.

| Subject. | Court docket No. | No. of act. | Act approved. | Case filed. | Award. | | Action taken. |
|------------------------|------------------|-------------|---------------|----------------|----------|-----------|--------------------------|
| | | | | | Damages. | Benefits. | |
| Alley square 1046..... | 724 | | | Apr. 5, 1907 | \$57.00 | \$276.59 | Confirmed July 29, 1907. |
| Alley square 2855..... | 738 | | | May 31, 1907 | 2,740.58 | 3,238.72 | Confirmed Jan. 10, 1908. |
| Alley square 2858..... | 740 | | | Aug. 2, 1907 | 2,740.58 | 3,238.72 | Confirmed Jan. 31, 1908. |
| Alley square 2849..... | 745 | | | Aug. 2, 1907 | 2,374.50 | 2,893.41 | Confirmed Jan. 10, 1908. |
| Alley square 905..... | 748 | | | Sept. 25, 1907 | 1,633.61 | 2,576.41 | Confirmed Mar. 3, 1908. |
| Alley square 743..... | 753 | | | Dec. 26, 1907 | 1,893.18 | 1,852.25 | Confirmed Mar. 3, 1908. |
| Alley square 2844..... | 755 | | | Jan. 7, 1908 | 1,783.75 | 1,030.00 | Confirmed Apr. 27, 1908. |
| Alley square 807..... | 761 | | | Jan. 16, 1908 | 1,783.75 | 2,016.27 | Confirmed Apr. 20, 1908. |
| Alley square 2854..... | 763 | | | Feb. 3, 1908 | 1,319.04 | 1,543.99 | Confirmed Apr. 27, 1908. |
| Alley square 347..... | 764 | | | Feb. 14, 1908 | 1,900.00 | 2,065.82 | No further action taken. |
| Alley square 2666..... | 768 | | | Mar. 31, 1908 | 1,900.00 | 2,065.82 | Confirmed May 22, 1908. |
| | | | | | | | Verdict not confirmed. |

MISCELLANEOUS.

| | | | | | | | |
|---|-----|-----|---------------|---------------|------------|------------|-------------------------|
| Part of lot 7, Bellevue, for addition to almshouse site. | 736 | 302 | June 27, 1906 | May 7, 1907 | \$6,000.00 | ..... | Confirmed Dec. 5, 1907. |
| Lot 29 and the west 14.90 feet of lot 28, square 542, site for truck house. | 767 |  | ..... | Mar. 30, 1908 | 2,893.58 | ..... | Confirmed June 5, 1908. |
| Piney Branch park way, from Sixteenth street to Rock Creek Park. | 735 | 135 | Feb. 27, 1907 | May 7, 1907 | 80,232.74 | \$3,352.00 | Confirmed Jan. 6, 1908. |

(AS.)

REPORT OF THE INSPECTOR OF ASPHALT AND CEMENTS.

WASHINGTON, September 1, 1908.

SIR: I have the honor to submit the following report of chemical and physical tests made by this office during the fiscal year ending June 30, 1908, summarized in the following tables:

Number of samples tested.

| | | |
|-----------------------------------|---------|--|
| Hydraulic cements: | | |
| Natural, brands 1..... | 130 | |
| Portland, brands 11..... | 10, 426 | |
| Asphalts: | | |
| Asphaltic cements..... | 666 | |
| Asphaltic surface mixtures..... | 301 | |
| Asphaltum oil..... | 1 | |
| Bermudez, crude..... | 1 | |
| Bermudez, refined..... | 44 | |
| California..... | 2 | |
| Cuban, crude..... | 1 | |
| Fairfield..... | 1 | |
| Gilsonite..... | 1 | |
| Kentucky rock asphalt..... | 2 | |
| Liquid asphalt..... | 2 | |
| Neuchatel, refined..... | 1 | |
| Texaco..... | 1 | |
| Trinidad, lake, refined..... | 2 | |
| Trinidad, land, crude..... | 1 | |
| Venezuelan, crude..... | 1 | |
| Oil, residuum..... | 29 | |
| Miscellaneous tests and analyses: | | |
| Block, asphalt..... | 1 | |
| Brass filings..... | 2 | |
| Bronze..... | 1 | |
| Coke..... | 1 | |
| Kerosene..... | 1 | |
| Lampblack..... | 3 | |
| Lead..... | 2 | |
| Lead, white..... | 1 | |
| Oil, road..... | 5 | |
| Sand..... | 364 | |
| Tar, water-gas..... | 1 | |
| Tarvia..... | 2 | |
| Thermometers..... | 24 | |
| Water..... | 5 | |
| Waterproof compound..... | 1 | |
| Wire..... | 5 | |
| Total..... | 12, 032 | |

HYDRAULIC CEMENTS.

Number of barrels inspected and the average results of tests on same.

NATURAL CEMENT.

[The 130 samples represent 1,246 barrels, of which 300 were rejected.]

| Brand. | Barrels. | Sam- ples. | Resi- due re- tained on 100- mesh sieve. | Initial set. | Water used. | | Tem- pera- ture of air and water. | Tensile strength per square inch. | | |
|--------------------------------|--------------|---------------|---|-----------------|-----------------|-------------------------------------|---|--------------------------------------|-------------|--|
| | | | | | Neat cement. | 2 parts stand- ard quartz. | | Neat cement. | | 7 days, 2 parts stand- ard quartz. |
| | | | | | | | | 1 day. | 7 days. | |
| Cumberland and Potomac..... | No. 1,246 | No. 130 | Per ct. 7.9 | Min. 27 | Per ct. 31.5 | Per ct. 13.2 | ° F. 72 | Lbs. 177 | Lbs. 255 | Lbs. 215 |

PORTLAND CEMENT.

[The 10,426 samples represent 99,472 barrels, of which 3,240 were rejected.]

| Brand. | Barrels. | Samples. | Residue retained on 100-mesh sieve. | Initial set. | Water used. | | Temperature of air and water. | Tensile strength per square inch. | | |
|---------------------------------|----------|----------|-------------------------------------|--------------|--------------|--------------------------|-------------------------------|-----------------------------------|---------|----------------------------------|
| | | | | | Neat cement. | 3 parts standard quartz. | | Neat cement. | | 7 days, 3 parts standard quartz. |
| | | | | | | | | 1 day. | 7 days. | |
| | No. | No. | Per ct. | h. m. | Per ct. | Per ct. | ° F. | Lbs. | Lbs. | Lbs. |
| Alpha..... | 1,000 | 106 | 5.8 | 2.00 | 18.7 | 9.1 | 74 | 561 | 787 | 347 |
| Do. ^a | | 15 | 5.0 | 4.45 | 17.3 | 8.7 | 73 | 687 | 924 | 333 |
| Atlas..... | 5,197 | 520 | 4.7 | 2.00 | 18.4 | 9.1 | 77 | 580 | 724 | 329 |
| Do. ^a | | 15 | 6.0 | 5.35 | 18.0 | 9.3 | 72 | 663 | 713 | 347 |
| Dragon..... | 31,503 | 3,057 | 6.2 | 3.00 | 18.7 | 9.3 | 74 | 567 | 825 | 349 |
| Do. ^a | | 15 | 6.7 | 4.10 | 18.0 | 9.3 | 75 | 699 | 782 | 362 |
| Giant ^a | | 15 | 10.0 | 4.25 | 18.0 | 9.3 | 74 | 459 | 701 | 301 |
| Lehigh..... | 29,752 | 3,418 | 6.8 | 3.00 | 17.9 | 8.9 | 79 | 438 | 726 | 299 |
| Do. ^a | | 15 | 7.5 | 4.05 | 17.3 | 9.3 | 76 | 438 | 765 | 291 |
| Meiers..... | | 24 | 14.7 | 3.00 | 20.3 | 9.3 | 70 | 216 | 768 | 248 |
| Nazareth..... | 15,880 | 1,588 | 5.1 | 3.00 | 17.6 | 8.9 | 77 | 500 | 822 | 308 |
| Do. ^a | | 15 | 3.1 | 3.30 | 18.0 | 9.3 | 77 | 868 | 979 | 339 |
| Old Dominion ^a | | 15 | 6.0 | 4.30 | 18.0 | 9.3 | 74 | 486 | 925 | 345 |
| Penn Allen..... | 2,330 | 233 | 6.0 | 2.00 | 20.1 | 9.3 | 83 | 489 | 667 | 312 |
| Saylors..... | 660 | 66 | 6.3 | 2.00 | 18.7 | 9.0 | 77 | 444 | 787 | 298 |
| Vulcanite..... | 13,090 | 1,309 | 7.0 | 3.00 | 18.3 | 8.9 | 78 | 483 | 885 | 355 |

a Samples submitted with bids for furnishing cement.

Barrels of cement tested during the year.

| | |
|-----------------------------------|---------|
| District of Columbia..... | 49,698 |
| Brennan Construction Company..... | 16,755 |
| Colburn Brothers..... | 13,195 |
| Cranford Paving Company..... | 7,770 |
| Blome & Co..... | 6,150 |
| Monroe Street Bridge..... | 2,620 |
| New York Avenue Bridge..... | 2,160 |
| New Municipal building..... | 1,050 |
| Anacostia Bridge..... | 660 |
| Tuberculosis Hospital..... | 660 |
| Total..... | 100,718 |

PETROLEUM RESIDUUM.

All residuum used this year by the contractors in their preparation of asphalt cements for laying sheet asphalt was the product of the Standard Oil Company and was found to be of good quality. A total of 29 samples were submitted for test and examination, as follows:

| | |
|-----------------------------------|----|
| Brennan Construction Company..... | 19 |
| Cranford Paving Company..... | 10 |

ASPHALTS.

Samples of asphalt submitted for use in the laying of pavements for the District by contractors showed the following percentage of bitumen soluble in carbon disulphide:

BRENNAN CONSTRUCTION COMPANY.

| | |
|---|-----------|
| 33 samples Bermudez refined, representing 2,003 tons..... | Per cent. |
| 1 sample Bermudez crude, representing 1,200 tons..... | 94.44 |
| | 85.00 |

CRANFORD PAVING COMPANY.

Per cent.

| | |
|---|--------|
| 11 samples Bermudez refined, representing 1,048 tons..... | 94. 14 |
| 2 samples Trinidad Lake refined, representing 220 tons..... | 54. 09 |
| 1 sample California grade D, representing 60 tons..... | 98. 70 |
| 1 sample Maracaibo refined, representing 1 ton..... | 94. 30 |

WASHINGTON ASPHALT BLOCK AND TILE COMPANY.

| | |
|---|--------|
| 2 samples Trinidad Lake crude, representing 2,497 tons..... | 52. 80 |
|---|--------|

There were also analyzed during the year for experimental purposes one sample each of the following asphalts: California; Texaco; Fairfield, refined; Neuchatel, refined; Cuban, crude; Trinidad Land, crude; Venezuelan, crude; and Kentucky rock. While the results of these tests are a record of the office, they are not given herein, for the reason the asphalts were not used by the District.

ASPHALT CEMENTS.

Tests made on the samples of asphalt cements, showing penetrations of asphalt topping and binder used by the two paving companies during the past year.

| | Asphalt binder cement. | | | | | | | Asphalt topping cement. | | | | | | |
|---------------------------|------------------------|---------------------|--------------------------|---------------------|--------------------------|---------------------|--------------------------|-------------------------|---------------------|--------------------------|---------------------|--------------------------|----|----|
| | Number of samples. | Penetration. | | | | | | Number of samples. | Penetration. | | | | | |
| | | High-est. | Low-est. | Aver-age. | High-est. | Low-est. | Aver-age. | | | | | | | |
| | | Obtained in office. | Obtained at paving yard. | Obtained in office. | Obtained at paving yard. | Obtained in office. | Obtained at paving yard. | | Obtained in office. | Obtained at paving yard. | Obtained in office. | Obtained at paving yard. | | |
| Brennan Construction Co.: | | | | | | | | | | | | | | |
| Bermudez..... | 182 | 86 | 86 | 63 | 67 | 73 | 73 | 251 | 63 | 63 | 46 | 47 | 55 | 54 |
| Bermudez and Cuban..... | 67 | 78 | 77 | 62 | 67 | 70 | 71 | | | | | | | |
| Cranford Paving Co.: | | | | | | | | | | | | | | |
| Bermudez..... | 23 | 80 | 80 | 62 | 63 | 66 | 69 | 48 | 60 | 65 | 47 | 50 | 53 | 54 |
| Cuban..... | 3 | 65 | 67 | 62 | 65 | 64 | 66 | | | | | | | |
| Maracaibo..... | 16 | 72 | 73 | 58 | 64 | 65 | 69 | | | | | | | |
| Trinidad Lake..... | 1 | 74 | 79 | 74 | 79 | 74 | 79 | 2 | 62 | 63 | 60 | 62 | 61 | 62 |

PER CENT LOSS BY VOLATILIZATION,

[Eighteen hours at 300° F.]

| | Asphalt binder cement. | | | | Asphalt topping cement | | | |
|---------------------------|------------------------|-----------|----------|-----------|------------------------|-----------|----------|-----------|
| | Number of samples. | High-est. | Low-est. | Aver-age. | Number of samples. | High-est. | Low-est. | Aver-age. |
| Brennan Construction Co.: | | | | | | | | |
| Bermudez..... | 13 | 4.7 | 1.8 | 2.3 | 23 | 4.8 | 1.4 | 2.1 |
| Bermudez and Cuban..... | 10 | 3.1 | .4 | 1.6 | | | | |
| Cranford Paving Co.: | | | | | | | | |
| Bermudez..... | 4 | 2.6 | 1.8 | 2.2 | 12 | 2.8 | 1.6 | 2.1 |
| Cuban..... | 1 | 1.3 | 1.3 | 1.3 | | | | |
| Maracaibo..... | 7 | 1.8 | .4 | 1.1 | | | | |
| Trinidad Lake..... | 2 | .8 | .5 | .6 | 1 | 1.0 | 1.0 | 1.0 |

ASPHALT SURFACE MIXTURES.

During the year 301 samples were submitted for examination and analyzed. The following tables show the maximum, minimum, and average per cent bitumen contained and the average mesh composition of sand used in the surface mixture:

| | Bermudez. | Lake Trinidad. |
|-----------------------------------|-----------|-------------------|
| Number of samples: | | |
| Brennan Construction Company..... | 251 | |
| Cranford Paving Company..... | 49 | 1 |
| Highest per cent bitumen: | | |
| Brennan Construction Company..... | 12.0 | |
| Cranford Paving Company..... | 11.8 | 11.1 |
| Lowest per cent bitumen: | | |
| Brennan Construction Company..... | 9.4 | |
| Cranford Paving Company..... | 10.1 | 11.1 |
| Average per cent bitumen: | | |
| Brennan Construction Company..... | 10.5 | |
| Cranford Paving Company..... | 10.8 | 11.1 |

MESH COMPOSITION OF SAND.

| | Brennan Construc- tion Co. | Cranford Paving Co. |
|--|----------------------------------|---------------------------|
| Sand per cent retained on sieves having— | | |
| 20 meshes per linear inch..... | 2.6 | 2.7 |
| 40 meshes per linear inch..... | 23.9 | 24.7 |
| 60 meshes per linear inch..... | 21.8 | 23.0 |
| 80 meshes per linear inch..... | 22.7 | 22.6 |
| 100 meshes per linear inch..... | 8.9 | 8.4 |
| Passing 100 meshes per linear inch..... | 20.3 | 18.7 |

INSPECTION OF SAND USED IN SURFACE MIXTURES.

Brennan Construction Company.—Two hundred and sixteen scows, equaling 27,000 cubic yards, of which there were rejected 11,750 cubic yards, or 43.5 per cent.

Cranford Paving Company.—Fifty scows, equaling 7,500 cubic yards, of which there were rejected 3,150 cubic yards, or 42 per cent.

MISCELLANEOUS AND SPECIAL EXAMINATIONS.

During the year miscellaneous tests and analyses as shown by table were made of various materials submitted by different divisions of the engineering department for analysis and the results thereon reported to the division submitting the same.

Very respectfully,

JULIAN O. HARGROVE,
Inspector of Asphalt and Cements.

Capt. EDWARD M. MARKHAM,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

REPORT OF SPECIAL ASSISTANT COUNSEL ON GRADE DAMAGES.

WASHINGTON, D. C., *October 12, 1908.*

SIR: In the matter of the appraisalment of the damages which have resulted to real property in the District of Columbia in consequence of changes made in the grades of streets, avenues, and alleys in connection with the Union Station improvements, I have the honor to submit the following report for the fiscal year which ended June 30, 1908:

There were 103 claims for damages heard and determined by the grade-damage commission during the year, involving 207 pieces of realty. In 66 of these cases damages were awarded landowners aggregating \$84,025, while in 37 of the cases the commission awarded no damages whatever to the claimants, upon the ground that the damages alleged to have resulted to the property under consideration had been offset

by the benefits and advantages shown to have accrued to the property by reason of the elimination of grade crossings, the establishment of the Union Railroad Station and terminals, and the works, buildings, and improvements incidental thereto.

The Commissioners of the District of Columbia, or the property owners, expressed dissatisfaction with the appraisements of the commission in 49 of the cases tried during the year, whereupon the supreme court of the District passed orders vacating and setting aside the appraisements of the commission, and directing the United States marshal to summon a jury of seven citizens in such cases, to appraise and determine the amount of damages to which the claimants may be entitled, as provided by Section V of the act of Congress approved April 22, 1904, entitled "An act to provide for payment of damages on account of changes of grade due to construction of the Union Station, District of Columbia."

The sum of \$6,635 was saved to the municipality during the year by the compromise of cases wherein jury trials had been ordered by the court, upon the expressing of dissatisfaction by the District with the appraisalment of the commission, as will hereinafter appear.

During the year there were 39 petitions for the allowance of damages filed, making a total of 739 petitions that have been presented to the commission for consideration.

The most important case tried by the commission during the year was that of Samuel C. McDowell, the owner of 18,500 square feet of ground, in square 680, bounded by North Capitol street, Massachusetts avenue, E street, and the Union Station Plaza. This case alone occupied the attention of the commission about six weeks, during which time the testimony of a large number of realty experts, builders, excavators, engineers, wreckers, and others was heard and considered.

While Mr. McDowell's ground is about 25 feet below the new grades of North Capitol street and Massachusetts avenue, and the improvements thereon—of the value of \$40,000—were rendered valueless by the alterations made in the street grades, the commission nevertheless found that the damage suffered by the claimant had been offset by the increase in the value of his ground produced by the elimination of grade crossings, the establishment of the Union Station and terminals, and the incidental improvements. Twelve realty experts testified for the District touching the enhancement in the value of the ground mentioned resulting from the Union Station improvements. Mr. McDowell has expressed dissatisfaction with the appraisalment of "no damages" rendered by the commission, thus showing an intention to try conclusions with the District before a jury.

The appraisements made by the commission during the year are as follows:

| Lot. | Owner. | Award. |
|--|--|------------|
| <i>Property abutting on L street, Third street, and Fourth street ne., in square 773.</i> | | |
| Lots 1, 2, 3, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, and 20. | Eugene S. Benjamin and Isador Saks..... | Nothing. |
| Lot 4..... | Marion J. Malone..... | Nothing. |
| <i>Property abutting on the south side of N street ne., between Third and Fourth streets, in square 772.</i> | | |
| East half lot 11..... | Alfred P. Lang..... | \$875. 00 |
| West half lot 11..... | Elizabeth Albers..... | 500. 00 |
| Lots 12, 14, 15, 16, and 17..... | Francis Winslow, Augustus Jay, and The American Security Trust Co., trustees. | Nothing. |
| <i>Property abutting on the east side of Third street ne., between M and N streets, in square 772.</i> | | |
| Lot No. 5..... | Mary Talty Fennell, Margaret L. Talty Tobin, Helen S. Talty, and Abbie R. Talty. | 800. 00 |
| Lot No. 8..... | Josephine M. Lang..... | 900. 00 |
| Lots 6 and 7..... | Elizabeth Albers..... | 1, 800. 00 |
| Lots 9 and 10..... | Mary Talty Fennell, Margaret L. Talty Tobin, Helen S. Talty, and Abbie R. Talty. | 1, 650. 00 |
| <i>Property abutting on the north side of McCullough street, in square 628.</i> | | |
| Lot 98..... | Wm. C. Gunnell..... | 675. 00 |
| Lots 99, 100, and 101..... | Edward H. Booth..... | 1, 840. 00 |
| Lot 102..... | J. Hall Lewis..... | 585. 00 |
| Lots 103 and 104..... | Wm. E. Dalton..... | 1, 125. 00 |
| Lots 105 and 106..... | Lula McCarthy Driver..... | 1, 065. 00 |

| Lot. | Owner. | Award. |
|--|---|------------|
| <i>Property abutting on the north side of McCullough street, in square 628.—Con.</i> | | |
| Lots 107 and 108..... | Princetta H. McCarthy..... | \$1,005.00 |
| Lot 109..... | Sallie B. Craig..... | 485.00 |
| Lots 110 and 111..... | The Baptist Home of the District of Columbia.. | 925.00 |
| Lots 112 and 113..... | Philip Joseph..... | 700.00 |
| Lots 114 and 115..... | Mary E. Sutliff..... | 325.00 |
| Lot 117..... | Annie V. Vermillion..... | 130.00 |
| Lot 118..... | J. Hall Lewis..... | 120.00 |
| Lot 119..... | Hattie J. Babbitt..... | 110.00 |
| Lots 120, 121, and 122..... | Albert W. Reed..... | 300.00 |
| Lot 123..... | John Driscoll..... | 100.00 |
| <i>Property abutting on Dingman place, in square 628.</i> | | |
| Lots 151, 152, and 153..... | Thomas Hoy..... | 1,935.00 |
| Lots 144, 145, 146, 147, 148, 149, and 150..... | George W. Harvey..... | 4,020.00 |
| Lot 143..... | Annie V. Vermillion..... | 505.00 |
| Lots 141 and 142..... | Annie M. Prescott..... | 905.00 |
| Lots 139 and 140..... | Linnie M. Bourne..... | 650.00 |
| Lot 138..... | J. Hall Lewis..... | 250.00 |
| Lots 134 and 135..... | Metella King..... | 320.00 |
| Lots 133 and 132..... | Charlotte E. Lockwood..... | 200.00 |
| Lot 131..... | Mary E. Wysham..... | 100.00 |
| Lots 128, 129, and 130..... | Annie V. Vermillion..... | 300.00 |
| Lot 127..... | Magdalena Mohr..... | 100.00 |
| Lot 126..... | Annie V. Vermillion..... | 100.00 |
| Lot 125..... | Clarence D. Wright..... | 100.00 |
| Lot 124..... | George M. Moore..... | 100.00 |
| Rear parts lots 16 and 17..... | Patrick F. Cusick..... | Nothing. |
| Lots 17 and 18..... | Katherine J. Falconer..... | Dismissed. |
| Rear part lot 20..... | Patrick F. Cusick..... | 500.00 |
| Rear parts lots 21 and 22..... | William K. Carr..... | 1,100.00 |
| Parts lots 21 and 22..... | do..... | Nothing. |
| <i>Property abutting on the south side of E street nw., between North Capitol street and New Jersey avenue, in square 630.</i> | | |
| Part lot 4..... | Joseph T. Ferry and T. Frank Ferry..... | 1,000.00 |
| Lot 55..... | Bushrod C. Hay..... | 225.00 |
| Lot 4..... | Severia A. Di Marzo..... | 600.00 |
| Lots 56, 57, 58, 59, and 60..... | Arnold T. Lewis..... | 8,500.00 |
| Lots 20, 21, 22, 23, and 24..... | William J. Acker and J. Acker..... | Nothing. |
| <i>Property abutting on the south side of McCullough street, in square 628.</i> | | |
| Lots 55, 56, 57, 58, and 59..... | Harriet E. Dodge, Anna C. Havenner, and Nina B. Havenner..... | 5,000.00 |
| <i>Property abutting on E street nw., between North Capitol street and New Jersey avenue, in square 628.</i> | | |
| Lots 163, 164, 165, 166, and 167..... | Robert R. Mahorney..... | 17,500.00 |
| Part lot 60..... | Edwin B. Behrend..... | 3,000.00 |
| Parts lots 60 and 61..... | Charles H. Davidson..... | 2,350.00 |
| Parts lots 61 and 62..... | Eva H. B. Bishop..... | 2,425.00 |
| Parts lots 62 and 63..... | Mary Lyons..... | 2,450.00 |
| Part lot 63..... | Charles C. Pursell, Cornelia A. Pursell, Frances J. Pursell, and Martha J. Woodward..... | 2,450.00 |
| Part lot 64..... | James A. Maher, Margaret Maher, Annie G. Maher, and Kate M. Spottwood..... | 2,450.00 |
| Part lots 64 and 65..... | Michael Morris..... | 2,550.00 |
| Parts lots 65 and 66..... | Bessie J. Kibbey..... | 2,500.00 |
| Part lot 66..... | Elizabeth M. Mueller..... | 3,000.00 |
| Lots 90 and 91..... | William J. Acker..... | 600.00 |
| Lot 92..... | Albert E. Acker..... | 100.00 |
| Lot 93..... | Lily A. Acker..... | 100.00 |
| Lot 94..... | Walter H. Acker..... | 100.00 |
| Lot 95..... | William J. Acker..... | Nothing. |
| Lot 155..... | William A. Wilkerson..... | Nothing. |
| <i>Property abutting on North Capitol street and McCullough street in square 626.</i> | | |
| Lots 40, 41, 42, 43, 156, 157, and 158..... | The Bakers' Cooperative Association of the District of Columbia, Howard L. Wilkins, and Claudius B. Jewell (The Anheuser Busch Brewing Association, St. Louis)..... | Nothing. |
| Lots 159, 160, 161, and 162..... | Albert Carry..... | Nothing. |
| Parts of lots 64 and 65..... | Marcia A. P. Saunders..... | Nothing. |
| Sublot 42, square 626..... | Ella E. Steele..... | Nothing. |

| Lot. | Owner. | Award. |
|--|---|----------|
| <i>Property in square 680.</i> | | |
| Sublots 30, 31, 32, 33, 34, and 35..... | Ellen M. Morse, Alexander Porter Morse, Daniel B. Clarke Waggaman, and the Union Trust Company. | Nothing. |
| Sublots 29, 36, 37..... | Samuel C. McDowell..... | Nothing. |
| Lot 9..... | D. K. Hackman, Edward F. Abner, and Peter A. Drury, trustees, and the Abner-Drury Brewing Co. | Nothing. |
| <i>Property abutting on the west side of North Capitol street, between Massachusetts avenue and G street nw., in square 625.</i> | | |
| Lots 31 and 32..... | J. A. Healy..... | Nothing. |
| Part lot 33..... | Mary E. McCarthy..... | Nothing. |
| Lots 34 and 35..... | Robert A. Dore..... | Nothing. |
| Parts lots 36 and 37..... | do..... | Nothing. |
| Part lot 37..... | William McGrath..... | Nothing. |
| Lots 38, 39, 40, and 41..... | Minnie Kensington..... | Nothing. |

The compromises effected with landowners during the year in cases wherein jury trials had been ordered by the court at the instance of the District are as follows:

| Lot. | Owner. | Award. | Compromise. |
|--|---|------------|-------------|
| <i>Property abutting on the north side of Massachusetts avenue, between North Capitol street and New Jersey avenue nw., in square 625.</i> | | | |
| Sublot 2..... | Mary C. O'Leary, Margaret Horn, Catherine V. Jackson, Johanna M. O'Leary. | \$1,700.00 | \$1,100.00 |
| Lot 3 and part lot 2..... | Silas S. Dalsb. | 800.00 | 250.00 |
| Lot 4..... | M. Frank Ruppert..... | 275.00 | 225.00 |
| Lot 5..... | W. Clarence Duvall and Sidney T. Thomas, trustees. | 200.00 | 150.00 |
| East 20 feet sublot 7..... | Jeremiah Mackessy..... | 2,500.00 | 2,000.00 |
| Parts lots 7 and 8..... | Margaret E. Kennedy, and John J. Sheehy, guardian. | 2,375.00 | 1,900.00 |
| Sublots 52 and 53..... | Maurice Collins..... | 900.00 | 650.00 |
| Sublot 12..... | Katherine Murphy..... | 200.00 | 150.00 |
| <i>Property abutting on the south side of F street, between North Capitol street and New Jersey avenue, in square 628.</i> | | | |
| Lots 68 and 69..... | Louise R. Britton, Catherine A. Reed, and Henry W. Reed. | 1,200.00 | 1,050.00 |
| Lot 70..... | Timothy O'Leary..... | 1,900.00 | 1,700.00 |
| Lots 71, 72, and 73..... | Patrick F. Cusick..... | 6,675.00 | 6,375.00 |
| Lot 74..... | John A. Sweeney..... | 1,800.00 | 1,600.00 |
| Lot 76..... | Michael T. Collins..... | 1,800.00 | 1,575.00 |
| Lot 77..... | Lee Heckinger..... | 1,800.00 | 1,600.00 |
| Lot 78..... | Mary Ida Thompson..... | 1,850.00 | 1,600.00 |
| Lot 79..... | Mary Millrick..... | 1,925.00 | 1,725.00 |
| Lot 80..... | Margaret Wroe..... | 1,875.00 | 1,675.00 |
| Lot 81..... | Martin Casby..... | 1,825.00 | 1,625.00 |
| Lot 82..... | Jennie W. Weinberg..... | 1,850.00 | 1,650.00 |
| Lot 83..... | Maud Thompson..... | 1,850.00 | 1,650.00 |
| Lot 84..... | Bridget Kane..... | 1,850.00 | 1,650.00 |
| Lots 85 and 86..... | John R. Hutchinson..... | 3,775.00 | 3,375.00 |
| Lot 87..... | Johanna C. Quinlan..... | 1,925.00 | 1,725.00 |
| Lot 88..... | Mary A. Foley..... | 1,950.00 | 1,725.00 |
| Lot 89..... | Nicholas McGowan..... | 2,200.00 | 1,950.00 |
| <i>Property abutting on E street NW., between North Capitol street and New Jersey avenue, in square 628.</i> | | | |
| Lots 163, 164, 165, 166, and 167. | Robert R. Mahorney..... | 17,500.00 | 16,400.00 |
| Parts lots 60 and 61..... | Charles H. Davidson..... | 2,350.00 | 2,100.00 |
| Parts lots 62 and 63..... | Mary A. Lyons..... | 2,450.00 | 2,000.00 |

The work of changing the grades of the following-named streets, avenues, and alleys was completed during the year, namely:

South Capitol street, from D street to Canal street.

Sixth street SW., between D and School streets.

C street SW., between Sixth and Seventh streets.

Virginia avenue SW., between Sixth and Seventh streets.

D street SW., between Sixth and Six-and-a-half streets.

Seventh street SW., between D street and Maryland avenue.

C street SW., between Seventh and Eighth streets.

Alleys in square 464.

Tenth street SW., between Maryland avenue and C street.

Maryland avenue SW., between Ninth and Eleventh streets.

Fourteenth street SW., between D street and Water street.

F street NE., between Second and Third streets.

Second street NE., between E and G streets.

In conclusion, I desire to testify to the industry and efficiency of Mr. Leonard P. Bradshaw and Mr. Gus. A. Schuldt, my assistants, in the discharge of their respective duties during the year.

I have the honor to be, very respectfully, yours,

A. LEFTWICH SINCLAIR,
Special Assistant Counsel.

Capt. EDWARD M. MARKHAM,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

SUBSURFACE AND BUILDING DIVISIONS.

Capt. WILLIAM KELLY,

Corps of Engineers, United States Army, Assistant to the Engineer Commissioner, in charge.

| | |
|--|---|
| WATER DISTRIBUTION..... | W. A. MCFARLAND, <i>Superintendent Water Department.</i> |
| WATER RATES..... | G. W. WALLACE, <i>Water Registrar and Chief Clerk, Water Department.</i> |
| SEWER CONSTRUCTION AND MAINTENANCE..... | ASA E. PHILLIPS, <i>Superintendent of Sewers.</i> |
| BUILDINGS, BUILDING INSPECTION, AND REPAIRS..... | SNOWDEN ASHFORD, <i>Inspector of Buildings.</i> |
| PLUMBING PLANS AND INSPECTION..... | H. B. DAVIS, <i>Inspector of Plumbing.</i> |

REPORT OF ASSISTANT IN CHARGE.

OFFICE OF THE ENGINEER COMMISSIONER
OF THE DISTRICT OF COLUMBIA,
Washington, September 29, 1908.

MAJOR: I have the honor to forward herewith the reports of the divisions of the engineer department under my charge for the year ending June 30, 1908, as submitted by the superintendent of the water department, the water registrar, the superintendent of sewers, the inspector of buildings, and the inspector of plumbing.

Very respectfully, your obedient servant,

WILLIAM KELLY,
*Captain, Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner.*

Maj. JAY J. MORROW,
*Corps of Engineers, U. S. Army,
Engineer Commissioner, District of Columbia.*

REPORT OF THE SUPERINTENDENT OF WATER DEPARTMENT.

WASHINGTON, D. C., *September 19, 1908.*

SIR: I have the honor to submit the following report of work done by the water department, District of Columbia, during the year ending June 30, 1908:

The organization remains essentially the same as described in last year's report, though a number of minor changes have been made in the interest of efficiency. These changes are indicated on the organization chart of the department.

A brief summary of the duties assigned to each division and of results accomplished follow:

DIVISION A.—*Maintenance and extension of distribution system.*

[J. S. GARLAND, assistant engineer, in charge.]

SUBDIVISION A 2.—*General engineering.*

The work of this subdivision consists in the preparation of plans and estimates for water-main extensions and other allied construction, in all field work and records incident to the carrying out of these plans, and in engineering work of a miscellaneous character.

In addition to the very large amount of routine work involved in making plans for and recording service and trunk mains (an idea of the volume of this work may be obtained from table of "Mains laid," appended hereto), surveys and plans were made

for changing the location of the 20-inch and 30-inch mains in the grounds of the United States Capitol, in order to permit the construction of the subways connecting the Capitol building with the new office buildings of the Senate and House.

Advantage was taken of excavations in this vicinity to secure much-needed data concerning the exact location of these and other mains.

In November the 36-inch force main to the Brightwood reservoir was broken by the settlement of a heavy fill on the line of Sixteenth street. Plans were at once made for capping the main north and south of the break, and temporarily connecting the ends with two lines of 12-inch pipe. This work was promptly executed. Incidentally it might be mentioned that by using direct pump pressure all premises had their water service restored within four hours of the time the break occurred. For a detailed statement of work accomplished reference may be made to the weekly and annual reports filed in this office, prepared by Mr. D. W. Holton, who is in direct charge of the subdivision.

The force usually employed in this subdivision consists of one assistant engineer, one leveler, two rodmen, two chainmen, two skilled laborers, and two horses, wagons, and drivers.

SUBDIVISION A 3.—*Care of property.*

The work of this subdivision consists in receiving, inspecting, recording, storing, and issuing all material bought for the use of all branches of the department; preparing quarterly returns of unexpended property, and in preparing lists of unserviceable property for condemnation and sale.

The property office, located in the District pumping station on Bryant street, is open at all times, day and night. Mr. S. Q. Kline, storekeeper, has charge, and has regularly under his orders one assistant storekeeper, three skilled laborers, one pipe inspector, four laborers, and two watchmen.

SUBDIVISION A 4.—*Miscellaneous building.*

The work of this subdivision, established only in October last, consists in the preparation of plans for buildings, repairs to buildings and masonry construction of all sorts, and in the supervision of the work of execution.

The first work undertaken was the preparation of foundations for the water department stable, located in the rear of the pumping station; this work was particularly difficult, owing to the fact that the stable was located over the line of two 48-inch water mains and in part on a comparatively new fill. Plans were prepared based on a system of concrete construction whereby piers were carried down to solid earth, being spanned at their tops with concrete-steel beams of such design as was necessary to meet the requirements imposed upon them. This work was performed by day labor, and consisted of 700 cubic yards of earth excavation, 225 cubic yards of concrete masonry, and 10,308 pounds of reinforcement steel. The work was completed on December 7, the day after the contract for the superstructure was awarded to Thomas H. Melton.

Mr. Melton's contract, amounting to \$21,300, was begun on Friday, December 27; was suspended, owing to freezing weather, on January 13, and not resumed until March 2.

The stable was ready for occupancy about the middle of June, but, owing to a delay in the delivery of lighting fixtures, was not occupied by the department until July 8 of the present fiscal year.

The work of grading the roadways, paving the stable yard, paving the wagon shed floors, laying electric conduits, erecting stable fixtures, painting walls of the stable, etc., was performed by the department.

The cement floors of the wagon shed consisted of 345 square yards of finished cement work; 175 linear feet of cement gutters, and 60 cubic yards of earth excavation, the cement work laid on a 5-inch base and blocked in 12-inch squares.

The paving of the stable yard consisted of 1,151 square yards of concrete 6 inches thick and 225 cubic yards of earth excavation. The object of this pavement was to secure a surface sufficiently smooth to carry off the water and yet sufficiently rough to afford a firm foothold for the horses. Consequently, concrete was first laid 6 inches thick and while still green covered with gravel and tamped. After the gravel had found its way into the concrete to a depth of about 1 inch, the whole surface was covered with a cement grout to cause the pebbles to adhere to each other. This type of paving is durable and costs only about one-third of vitrified brick or asphalt block, and it is believed will answer the purpose for which it was intended better.

During and subsequent to the construction of the stable the following work was performed:

Material bins of brick and concrete masonry were constructed in the rear of the pumping station. These bins were designed for the storage of coke, sand, and gravel, which had hitherto been exposed to the weather.

A brick manure house was constructed at the U-street stable, being about 12 feet by 15 feet square and constructed in accordance with the regulations governing such structures as established by the health officer.

Scales for weighing material were constructed in the rear of the material bins convenient to the stable.

A cement floor was built around No. 7 pump in the pumping station and cement drains built into it.

Plans were prepared for a wall around the lot west of the pumping station and an estimate of cost made for the work.

Plans were made for a system of reenforced concrete vault construction in lieu of the brick construction in present use. The concrete vaults can not only be constructed for considerable less than one-half the cost of the brick, but are much stronger.

Preliminary plans were made for the proposed Anacostia Reservoir, for a storage shed at the pumping station, and for a shelter for employees, the storage shed to be of masonry and used for the storage of fittings, tool wagons, etc., now exposed to the weather.

A fireplace was constructed in the superintendent's office at the pumping station; the ceiling was furred with metal lath and plastered.

Roads were constructed around the material bins and stable and the sheds adjacent thereto were demolished.

Plans were made for a new floor in the gate house at Reno Reservoir, for a retaining wall at the corner of the new stable, and for a new manure house, the existing pit as designed by the architects for the stable being entirely inadequate.

The retaining wall at the corner of the stable was begun, 410 cubic yards of earth removed, and the footings constructed.

Cement curbs were constructed around the roads adjacent to the stable, gutters were constructed, and top soil placed in the grass plots. Such traps and plumbing as was necessary to care for the water were constructed.

Where necessary, surveys were made for all of the work hereinbefore mentioned, and the lots adjacent to the pumping station were cross sectioned and the earth quantities computed.

A system was designed and inaugurated for the construction of valve-casing foundations of reenforced concrete. The foundation consists of concrete rings 3 feet in diameter, 8 inches by 4 inches high, 3 inches thick, and reenforced with 16-gauge expanded metal. To date about 150 of these rings have been used and have proven to be not only more economical than the old brick construction, but the department is now enabled to build a foundation in five minutes, whereas with brick construction one whole day was required to construct a foundation 4 feet deep.

To illustrate the economy of these rings, take, for example, a masonry foundation 4 feet deep of brick.

This required the services of a bricklayer and force one day of eight hours. The bricklayer's force account and the material used was as follows:

| | |
|--|---------|
| One bricklayer, at \$5 per day..... | \$5. 00 |
| Two laborers, at \$1.75 per day..... | 3. 50 |
| Cart and driver, at \$2.25 per day..... | 2. 25 |
| 420 red brick, at \$9 per thousand..... | 3. 78 |
| $\frac{3}{4}$ barrel Portland cement, at \$1.79..... | 1. 31 |
| $\frac{1}{2}$ cubic yard sand, at \$1.20..... | . 40 |
| Total..... | 16. 24 |

For a 4-foot foundation of concrete six 8-inch rings are required. These rings in place cost 50 cents each; therefore the cost of the foundation would be \$3, as against \$16.24 for the brickwork. It is therefore demonstrated that the cost of the concrete foundation is less than 20 per cent of the cost of the brick foundation, not taking into consideration the time lost by the bricklayer and his outfit in moving about.

One ring 8 inches high cares for a height formerly occupied by 6 square feet of brickwork 9 inches thick, or 72 brick, which, at \$9 per thousand, is equal to 65 per cent, so it may readily be seen that the cost of the rings is considerably less than the cost of the brick alone without mortar and without labor, which last item alone amounted to \$10.75 per day current expense.

An itemized cost of these rings is as follows: One ring 8 inches high contains 0.0767 barrel of cement, equal to one-thirteenth of a barrel; 0.048 cubic yard of gravel, equal to one-twentieth of a yard; 0.024 cubic yard of sand, equal to one-fortieth of a yard.

The cost of one ring is, concrete, 25 per cent; labor, 7 per cent; steel, 16 per cent; total, 48 per cent, roughly figured at 50 per cent.

To sum up the relative merits of the brick and concrete construction the use of concrete saves the department a current expense of \$10.75 per day; avoids the delays attending brick construction; is as readily removed as the brick, and is much stronger.

Practically all of the work described above was designed by Mr. Carroll Beale, in charge of the subdivision.

SUBDIVISION A 5.—Care and recording of valves, fire hydrants, street hydrants, etc., and care of reservoirs.

This subdivision is charged with caring for and making and maintaining complete records of all valves, fire hydrants, street hydrants, etc.; with the execution of miscellaneous plumbing, and with general supervision over Brightwood and Reno reservoirs.

There have been cared for during the year: 5,902 valves, 2,422 fire hydrants, 257 street hydrants, 124 drinking fountains for animals, 11 shallow wells, and 31 deep wells.

A tabular summary of the more important items of work done follows:

| | |
|---|---------|
| Valves operated and cleaned..... | 11, 103 |
| Valve stems packed..... | 390 |
| Valve manholes cleaned..... | 1, 744 |
| Valve number plates placed..... | 482 |
| Valves uncovered ^a | 77 |
| Cards made showing location of mains in alleys..... | 535 |
| 50-foot scale maps corrected for new work..... | 931 |
| Index cards corrected for new work..... | 779 |
| Street intersections located..... | 576 |
| Index cards completed..... | 110 |
| Fire hydrates inspected..... | 58, 387 |
| Fire hydrants painted..... | 659 |
| Fire hydrants repaired..... | 1, 294 |
| Fire hydrants lubricated..... | 6, 192 |
| Street hydrants repaired..... | 325 |
| Street hydrants erected..... | 22 |
| Street hydrants removed..... | 27 |
| Horse fountains repaired..... | 241 |
| Horse fountains cleaned..... | 4, 415 |
| Horse fountains erected..... | 5 |
| Pumps repaired..... | 44 |
| Pumps erected..... | 8 |
| Pumps removed..... | 57 |
| Service pipes repaired..... | 111 |
| Service pipes reconnected..... | 70 |
| Service pipes adjusted..... | 74 |
| Wells cleaned..... | 10 |

Reno and Brightwood reservoirs were thoroughly cleaned, the former at a cost of \$125.81 and the latter \$372.50. Mud to a depth of 5 inches was found in Reno, while at Brightwood there was about 4 inches in the north basin and 3 in the south.

A very large amount of minor miscellaneous work was accomplished. This is described in detail in the weekly and annual reports prepared by Mr. H. Beckett, chief inspector of valves, in charge of the subdivision.

SUBDIVISION A 6.—Laying mains, erecting fire hydrants, repairing leaks, etc.

All miscellaneous construction work except of buildings and machinery is done by this subdivision. For a statement of routine work accomplished, attention is invited to Tables 1, 2, 4, 6, and 7, appended hereto, where such work is described in detail.

The total number of leaks in water mains and appurtenances reported during the year was 2,029, or an average of nearly 6 per day. As these leaks were scattered over the entire water system their repair involved a very large amount of work. Of the leaks reported, 81 proved to be breaks in mains, though only 2 were in pipes larger than 12 inches, 725 leaks in lead joints; 850 leaks in service pipes; 137 were false reports, and the balance proved to be leaking valves, obstructed sewers, duplicate reports, etc.

The "reserve wagon," which is kept in constant readiness but is not sent out except in emergencies, when the regular force is unavailable, was out only 74 times during the year.

^a These are valves which are covered owing to change of grade or from dirt washing over them.

SUBDIVISION A 9.—*Miscellaneous drafting.*

This subdivision is charged with the preparation of drawings and tracings of all water-main maps; of certain mechanical apparatus and other appurtenances used either in the shops, office, pumping station, or in the field; with the making from records of corresponding departments of plats showing proposed water-main extensions and indicating adjacent property lines, existing water mains, sewers, etc.; with the recording of mains, fire hydrants, and other new constructions on all maps of record; the preparation of bills of material for each new job of field work as ordered, and with the furnishing of verbal and written information on subjects relative to water-department work.

Following is a summary of the chief items of work done during the year:

| | |
|---------------------------------|-----|
| Drawings and tracings made..... | 654 |
| Projects made..... | 184 |
| Mains recorded..... | 122 |
| Fire hydrants recorded..... | 71 |
| Horse fountains recorded..... | 4 |
| Public hydrants recorded..... | 4 |
| Pumps recorded..... | 3 |
| Bills of material..... | 82 |
| Communications written..... | 375 |

A comparison with the annual report of this division for 1906-7 will show the increase in results accomplished. The percentage over the work of last year is as follows:

| | Per cent. |
|---------------------------------|-----------|
| Drawings and tracings made..... | 21 |
| Projects made..... | 44 |
| Mains recorded..... | 40 |
| Fire hydrants recorded..... | 42 |

Horse fountains, public hydrants, and pumps show a decided decrease in number recorded.

| | Per cent. |
|-----------------------------|-----------|
| Bills of material..... | 78 |
| Communications written..... | 67 |

This increased output was effected by the same force as in the year previous.

The character of the work of this division is shown by the following: Drawings and tracings are made of all water-main maps and of certain mechanical apparatus and other appurtenances used in the shops, office, or pumping station. Drawings alone are made of the foreman's plats which show the work as completed on each job in the field. A considerable amount of architectural drawings, in the form of sketches as well as in finished drawings, has been done during the year, and the credit for the work, in a large part, should be given to Mr. Kennelly.

The construction of a 6 section 300-foot map of the District of Columbia to show all dedicated streets and roads in the District; the water mains, valves, and fire hydrants; the dividing water service contours, 70, 140, 210, and 350 feet, and other similarly important data necessary in a good study map for the extension of the system, was begun on or about March 21, 1908.

On April 21, 1908, the construction of a graphical log was begun by the drafting division. This log, posted daily, through its several elements gives a graphical illustration of the results obtained at the pumping station.

Projects for proposed extensions of the public water mains are made from records contained in the several corresponding departments and show adjacent abutting property, water, sewer and gas mains, electric conduits, etc.

In recording mains, fire hydrants, horse fountains, public hydrants, and pumps it is necessary to make records upon all the maps in the office. Until July 1 last this included the 400-foot scale wall map; the 300, 100, and 50 foot scale tracings; special maps of horse fountains, pumps, and public hydrants, and upon certain card indexes. Mains recorded include not only the mains themselves, but all connections, services, valves, the additional of special parts or fixtures, etc., which are installed as new work, removed, lowered, or changed in any form and as reported by any of the several field parties of the department. Bills of material are compiled for each job of new field-work as ordered and are to show the necessary materials for each piece of such work. The object being in this way to eliminate, as far as possible, unnecessary hauling.

Under the head of "Communications written" may be included all reports upon projects and files passing through this office as they pertain to the extension of water mains, applications for estimates for the installation of special private service connec-

tions; changes in existing mains and work of such similar character; writing of weekly reports; postal-card followers for all information concerning the location of mains or fire hydrant pressures as given out over the telephones, and the compilation and writing of special reports of such character as are referred directly to this division for disposal.

Verbal information upon many phases of the work of the department is given out as part of the work of this division to all officials and private persons requesting same in person.

In addition to the above, much of what might be termed routine work has been transacted by the division. Under this head may be listed posting new taps; miscellaneous lettering; special designation card for the exhibits in the museum at the pumping station; making special books of blueprints; changing street names in and around the city on all live maps, tracings, etc., in the office; making certain index and record cards; figuring weights of special castings; making blueprints, etc.

The subdivision is in charge of Mr. F. W. Albert, chief draftsman.

SUBDIVISION A 10.—Telephone switchboard.

A department telephone switchboard is maintained at the District pumping station, connected by means of 4 trunk lines with the system of the Chesapeake and Potomac Telephone Company, by 1 line with fire-alarm headquarters, 1 with police headquarters, and by 15 lines with the various divisions and branches of the department, reservoirs, etc. Practically all telephone business is transacted through this subdivision, which keeps in touch with the various field operations and is particularly useful in the transmission of current orders. One chief operator and 3 operators are employed, the service being, of course, continuous. In addition to the regular telephone business, the work of the subdivision consists in general in receiving and recording reports of leaks and transmitting orders for repair to the leak gangs; receiving and recording all fire alarms and transmitting same to employees designated to respond to second and additional alarms; receiving and recording reports of "fire hydrants out of service," and reporting same to the fire department, receiving, recording, and transmitting orders for hauling; keeping records of repair of fire hydrants, street hydrants, pumps, fountains, and wells; records of reservoir levels; of locations of new jobs for information of foreman; of daily consumption of water, etc.

During the year 89,900 telephone connections were made through this switchboard. H. C. Fowler, chief operator, is in charge, assisted by 3 operators.

DIVISION B.—Meters.

The installation of meters in private dwellings was continued with the beginning of the fiscal year, July 1, 1907, and, with two weeks' interruption on account of a delay in the delivery of material, was extended until operations were stopped on November 30. Meters were installed in the northern part of the city and county embracing the first, second, and third high-service area and a portion of the city supplied by gravity. These districts are located at Brookland, Langdon, Eckington, the Conduit road and that portion of West Washington extending to the water front and as far east as Rock Creek. The part of the city in the vicinity of Florida avenue to Rhode Island avenue and from Fourth street west to Eckington east was completed. In addition to a small section of the city on New Jersey avenue, between Q street and Florida avenue NW., and N street, between Fourth and Fifth streets NW., where excessive waste was discovered, practically the entire city and county north of a boundary line of Florida avenue and Rock Creek were metered. In five months, from July 1 to November 30, 4,168 water meters were installed on the services supplying Potomac water to private dwellings in the portions of the city and county mentioned.

The following table shows the organization of this force:

| | |
|-----------------------|----|
| In charge..... | 1 |
| Inspectors..... | 2 |
| Plumbers..... | 3 |
| Helpers..... | 4 |
| Laborers..... | 33 |
| Drivers..... | 2 |
| Two-horse wagons..... | 2 |

The following additional work was performed in connection with the installation of water meters:

| | |
|--|-------------|
| Adjusted meters to proper grade..... | 70 |
| Paving..... | yards 1,678 |
| Installed street washers..... | 16 |
| Communications answered..... | 88 |
| Repairs to lawns..... | 76 |
| Repairs to leaking services..... | 158 |
| Cuts in improved pavements reported..... | 124 |
| Complaints investigated..... | 95 |
| Leaks reported to water registrar..... | 101 |
| New services installed..... | 12 |
| Meters removed ^a | 3 |

In installing meters in West Washington, considerable difficulty was experienced in finding dead services and premises where there were two or more services supplying the same house. By the former about 200 holes were lost and in the latter instances the pipes and by-passes were cut out and simplified in order to properly set meters. In parts of this territory the soil was rocky, necessitating, in some instances, the drilling through solid rock for the purpose of placing meter pit.

The following shows the average cost of installing a meter:

| | |
|---------------|--------|
| Meter..... | \$9.00 |
| Material..... | 4.99 |
| Labor..... | 2.34 |
| Total..... | 16.33 |

The total average number of meters installed per week of six working days is 232. These averages are for the entire eleven months of work.

At the expiration of the work of installing meters in private dwellings, tools and material were withdrawn from the storekeeper with a view of installing meters in the various buildings owned and controlled by the District of Columbia. Inspections were made of these buildings and the conditions governing the water supply thereto and an estimate made of the cost of this work. The organization of this force was as follows:

| | |
|-------------------------------|---|
| In charge..... | 1 |
| Helpers..... | 4 |
| Laborers..... | 2 |
| Driver, horse, and wagon..... | 1 |

The following table shows the Hersey meters and by-passes installed in the various buildings owned and controlled by the District government:

| | Meters. | | By-passes. | | | |
|------------------------------|---------------------|---------------------|------------|-------------------------|-----------|-----------|
| | $\frac{3}{4}$ inch. | $\frac{1}{2}$ inch. | 1 inch. | 1 $\frac{1}{2}$ inches. | 2 inches. | 3 inches. |
| School buildings..... | 1 | 30 | 7 | 81 | 4 | 1 |
| Police stations..... | 2 | 10 | | | | |
| Fire-engine houses..... | | 21 | | | | |
| Truck houses..... | | 7 | | | | |
| Chemical-engine houses..... | | 1 | | | | |
| Miscellaneous buildings..... | 16 | 17 | | 2 | 3 | 2 |
| Total..... | 19 | 86 | 7 | 83 | 7 | 3 |

The average cost of installation of meter, including cost of meter and pit, material, and labor, will approximate very closely the estimate submitted, viz, $\frac{3}{4}$ -inch size, \$19.25; $\frac{1}{2}$ -inch size, \$23.44. It is impossible to give the average cost of installation of meters larger than the $\frac{1}{2}$ -inch size, as these have not been purchased by the department, although by-passes and pits have been installed ready for meter when supplied.

Mr. W. F. Sullivan was in charge of this division.

^a This number is deducted from total.

DIVISION C.—Inspection of machinery, pipe, specials, etc., at point of manufacture.

During the year two inspectors have been employed, one at Milwaukee, Wis., on the inspection of a 30,000,000-gallon pumping engine built for this department by the Allis-Chalmers Company, and the other at Lynchburg, Va., on cast-iron water pipe and specials.

DIVISION D.—Revenue and inspection branch.

For the work of this division attention is invited to the report of the water registrar, Mr. G. W. Wallace, appended hereto.

DIVISION E.—Miscellaneous clerical.

This division is charged with all work relating to records of contract material delivered, preparation of vouchers for contract and open-market purchases, transfer vouchers for work done by the department on deposit of cost, or for other departments on account; with transmission of all papers to their proper destinations; with keeping of all accounts relating to the employment of labor, expenditure of material, job costs, etc., and with making of requisitions for material as called for by other divisions and the handling of all miscellaneous correspondence.

During the year 2,631 vouchers and 1,942 "files" were received and forwarded; 582 requisitions for material made; 306 transfer vouchers prepared; 18,451 communications mailed; 754 card records made; 1,055 work orders transmitted; 519 official letters forwarded; miscellaneous papers handled, 9,407; letters received and filed, 889; 241 pay rolls prepared; and 18,603 material slips checked, entered, and filed.

Mr. W. C. Small, clerk, has charge of this work.

DIVISION F.—Pitometer surveys for the detection of waste.

The work of this division has been much expanded, the organization during the year being as follows: One pitometer operator in charge of surveys, with driver, horse, and wagon; 4 field parties, each consisting of 1 operator, 1 assistant operator, 1 inspector, 1 or 2 laborers and driver, horse, and wagon, 1 draftsman, 1 index clerk and typewriter.

It is the duty of the operator to obtain all necessary information for the isolation of districts, to prepare blueprints showing the district and the closed valves, to devise and keep posted the most expedient method to give an abundant supply in case of fire, to compute records and give the necessary data for posting and indexing the results of the survey, and to supervise the field work of the party.

With the assistance of the inspector, the assistant operator attends to the isolation of the district, sets the meter, and attends to the records, and when not otherwise employed lends a hand in the inspection of the district.

The 200-foot scale tracings of the pitometer districts, the recording of the changes and additions to the system, of the location of permanent connections, and the posting up of the results of pitometer surveys are the duties assigned to the draftsman, while the index clerk and typewriter is the official timekeeper, attends to the daily and weekly reports, the notifications to the water registrar of all leaking fixtures found, and all other correspondence, as well as the index-card system showing the results of pitometer surveys.

During July and August two additional draftsmen were employed to make tracings of the 50-foot scale maps, and by that time the progress made allowed the work to be completed by the regular draftsman during the year.

In order that at no time the isolation of a district should constitute a source of danger in case of fire, or cause unnecessary annoyance by interfering with the proper cut-offs for the repairs of leaks, hydrants, etc., blueprints showing the isolated districts and closed valves are kept posted in each box, and copies are furnished to the general foreman, chief inspector of valves, and the bureau of information. A set of the isolated districts is also kept in the drafting room in order that information may be given while the parties are in the field.

A typewritten note of the most expedient way to increase the volume in case of fire is kept posted in every box and a copy furnished to the chief telephone operator.

The total underground waste found and repaired during the year amounted to 5,604,400 gallons per day, while in the course of the survey careless waste to the amount of 879,000 gallons per day was at least temporarily stopped in United States and municipal institutions.

The cause of the waste is shown in the following table:

| | Under-ground waste per day. | Careless waste per day. |
|---|-----------------------------|-------------------------|
| | Gallons. | Gallons. |
| 8 leaks in fire hydrants..... | 174,000 | |
| 14 defective wiped joints..... | 327,000 | |
| 47 defective joints in mains from 3 to 12 inches..... | 1,013,900 | |
| 191 leaking services..... | 2,729,000 | |
| | 4,243,900 | |
| <i>United States Government buildings.</i> | | |
| Navy-yard, 2 broken mains and 1 defective valve..... | 1,200,000 | 804,000 |
| State, War, and Navy building, 3 defective hydraulic lifts and 1 defective valve..... | 111,000 | |
| Columbian Institution for the Deaf and Dumb, 1 defective joint and valve..... | 26,000 | 75,000 |
| | 5,580,900 | 879,000 |
| <i>Municipal institutions.</i> | | |
| Bathing beach, 3 defective valves..... | 23,500 | |
| Jackson School..... | 40,000 | 40,000 |
| Addison School..... | 24,000 | 24,000 |
| Brent School..... | 35,000 | 35,000 |
| | 5,604,400 | 978,000 |

Unrecorded valves found:

| | |
|-------------|---|
| 3-inch..... | 1 |
| 6-inch..... | 1 |

Unrecorded mains:

| | |
|-------------|-------------------|
| 3-inch..... | linear feet.. 229 |
| 6-inch..... | do. 422 |

ILLEGITIMATE CONSUMPTION.

In the Washington Railway and Electric Company's barn in P street NW unmetered supply to paint and motor shops and to boiler room of the plant.

A 12-inch divide valve between the gravity and first high service was found open the day after it had been operated by employees of the United States Capitol.

A leak through a 12-inch check valve between the third and fourth high services, amounting to 82,000 gallons per day, was discovered within three hours after commencing the investigation.

A 2-inch divide valve between the second and third high services was also found open at the District pumping station, and notices of over 2,900 houses where leaking fixtures existed were forwarded to the water registrar for repairs.

Without exception the leaks in fire hydrants were due to defective valves or to extraneous matter caught between the valve and seat.

The defective wiped joints were caused in all instances but one, where an iron pipe split at the joint, by poor workmanship, in one instance two defective wiped joints having been found in the same service.

The wisdom of laying all mains by day labor instead of by contract, as was formerly the custom, was clearly brought out in the results. Not a single defective joint was found in the recent work, while in the old one defective joints were always found grouped, as many as seven having been found in one square.

As was to be expected, the leaks in services were found in the old black iron pipes, where the corrosion was so severe that on several occasions the pipe was practically cut in two, water being only available on the ground floor, and there with scarcely any pressure. One flaw in a lead pipe was found, and in six cases the quarter bend of the corporation cock was found split.

The aquaphone has been of the greatest assistance in locating the leaks, and after the fact was once established that an abnormal consumption existed in a square the source of the trouble was in most instances discovered by means of the aquaphone.

The total cost of the work was \$22,982.25, as follows:

| | |
|--|-------------|
| Superintendence and labor..... | \$15,929.92 |
| Transportation, materials, and cuts..... | 7,052.33 |
| Total..... | 22,982.25 |

This includes the cost of installing 51 permanent pitometer connections; the rental of two pitometers at \$100 per month; the purchase of four field wagons for the pitometer parties; \$871.07 for repairs of cuts made to clean or replace cut-off boxes over leaks in mains or where no leaks existed. It also includes the cost of the furniture necessary to accommodate the increased force, clerical work, storing of records, etc., and for developing records and storing tools and materials.

Of the waste prevented, 4,346,000 gallons per day was the amount saved in the high services, and although the population has increased by over 15,000, the greatest increase being in the territory covered by the surveys, and notwithstanding the abnormally warm and dry spring and summer, which increases the consumption for watering lawns, etc., it is worthy of notice that the total pumpage was over 900,000,000 gallons less than that of the previous year.

The results accomplished as indicated above are in my opinion extraordinary.

The stopping of underground leaks amounting to 5,600,000 gallons per day, assuming the water to cost 1 cent per thousand gallons, represents a permanent yearly saving of \$20,440, or 89 per cent on the total investment.

Mr. O. C. Smith was in charge of the division during the year.

DIVISION G.—*Tests and experiments.*

The work of this division consists in calibrating, testing, and measuring apparatus used by the department; in making calorimetric tests of coal delivered at the pumping station; in making accuracy tests of all water meters to be used in the District of Columbia; in making special tests of boilers and machinery as called for, and in keeping necessary records.

During the year the steam plant has been equipped with additional testing apparatus, including recording gauges connected with the steam, suction, and several high-pressure mains; automatic measuring tanks connected with the drainpipe from the heating system; and pitometer pump-slip indicators installed on the discharge pipes of all pumping engines.

The following special tests were made: Determinations of the steam consumption of the auxiliary feed pumps, feed-water heater and hot-water tank; duty trials of the new 30,000,000 gallon Allis Chalmers engine; boiler trials to determine the comparative value of several kinds of bituminous coal; a series of tests to determine the relation between per cent of CO_2 in flue gases and boiler efficiency for better management of turnaces.

Miscellaneous tests include the following: Valves tested for leaks, $\frac{1}{2}$ to 24 inch sizes, 932; corporation cocks, tests for leaks, $\frac{1}{4}$ to $1\frac{1}{2}$ inch sizes, 1,235; stop cocks, tests for leaks, $\frac{1}{4}$ -inch size, 2,355; pressure gauges tested and corrected, 170. Also made calibrations of pyrometers, draft gauge, weighing scales, automatic measuring tanks, recording gauges, etc.

The endurance test of water meters, started May 31, 1906, to secure information for the guidance of the department in the selection of meters for local use was stopped October 22. The meters running at the end of the test had performed wonderfully, considering that no repairs had been made; several of the $\frac{3}{4}$ -inch sizes having records of more than 1,250,000 cubic feet, and the $\frac{1}{2}$ -inch sizes, 1,625,000 cubic feet.

The sizes and makes of all private and municipal water meters tested during the year are shown in the accompanying table. Meter test records are filed under the card-index system, and duplicates are forwarded to the water registrar.

Calorimetric tests were made of all coal delivered at the pumping station, the delivery being 300 tons (approximately) each month. In selecting a sample for test a small quantity of the coal was taken from the front and rear ends of each wagon load as received. These were combined for monthly periods, and the required sample obtained by the process of quartering down. Determinations were made with the Carpenter fuel calorimeter, and are shown in the accompanying table.

Reports of all special tests and monthly statements showing the pumpage, consumption, mean water pressures, force of draft entering and leaving economizers and at base of stack, steam at boilers, mean temperatures of outer air, boiler room, water in mains, water entering economizers and boilers, gases entering and leaving economizers, vacuum pressures, foot-pounds of work by engines and generators, coal burned, feed water supplied, station duties, per cent of CO_2 in flue gases, etc., have been submitted. Reports were also made of tests of hot-water meters, meters tested for endurance, accuracy tests of the pump slip indicators, and of proposed plans for management of turnaces and for equalizing the work of boilers.

The official ten-hour duty test of the vertical, triple-expansion, crank and fly-wheel condensing pumping engine built by the Allis-Chalmers Company was made February 10. The contract required the engine to pump 30,000,000 gallons of water in

twenty-four hours, measured by plunger displacement, against a net pressure of 35 pounds by gauge, and develop a duty of 160,000,000 foot-pounds for each 1,000 pounds of dry steam used in the engine and auxiliaries, with steam pressure of 150 pounds by gauge at throttle. The actual duty obtained exceeded the duty required by contract by 7,234,000.

The average station duty for the year was 82.57 million foot-pounds per 100 pounds of coal burned. No continuous record of the station duty was kept previous to December 1, 1906, and in the beginning the computations of the duty included the coal used in the heating system. Comparisons, however, between the average station duties obtained during April (=83.2), May (=86), and June (=89.8), with the corresponding months in 1907, show increases of 12.4, 13.1, and 16.2 per cent, respectively.

The normal force employed consisted of 2 skilled laborers, 1 plumber, and 1 laborer.

Tests of water meters during fiscal year ending June 30, 1908.

| Meter. | Sizes. | | | | | | | | | Total. |
|---------------------|--------|-------|-------|-------|--------|-------|-------|-------|-------|--------|
| | ½ in. | ¾ in. | 1 in. | 1 in. | 1½ in. | 2 in. | 3 in. | 4 in. | 6 in. | |
| American..... | | 53 | | | | | | | | 53 |
| Columbia..... | | 3 | | | | | | | | 3 |
| Crown..... | | 6 | 9 | 7 | 1 | 7 | | | 2 | 32 |
| Empire..... | | 8 | 6 | | | | | | | 14 |
| Gem..... | | | | | | 16 | 5 | | | 21 |
| Hersey..... | | 3,170 | 171 | 15 | 14 | 9 | 3 | | | 3,382 |
| Keystone..... | | 3 | 1 | 1 | | | 1 | | | 6 |
| King..... | | 11 | | | | | | | | 11 |
| Lambert..... | | 8 | 51 | 26 | 13 | 10 | 11 | | | 119 |
| Nash..... | 2 | 15 | 160 | 112 | 57 | 34 | 9 | 6 | | 395 |
| Niagara..... | | 3 | 3 | | 4 | | | | | 10 |
| Pittsburg disk..... | | 6 | 20 | 5 | 4 | 1 | 7 | | | 43 |
| Standard..... | | 5 | 27 | 12 | 5 | 1 | | | | 50 |
| Thomson..... | 6 | 1 | 50 | 45 | 27 | 21 | | 4 | | 154 |
| Trident..... | | 2,649 | 61 | 3 | | 5 | 4 | | | 2,722 |
| Union..... | | 3 | 11 | 10 | | 12 | 2 | | | 38 |
| Worthington..... | | 30 | | 1 | | 8 | 1 | | | 40 |
| Total..... | 8 | 5,974 | 570 | 237 | 125 | 124 | 43 | 10 | 2 | 7,093 |

Analysis of Georges Creek bituminous coal delivered during 1907-8 at the District pumping station, Washington, D. C.

| | July. | Sept. | Oct. | Nov. | Dec. | Jan. |
|----------------------------|--------|--------|--------|--------|--------|----------|
| Dry coal: | | | | | | |
| British thermal units..... | 14,155 | 14,357 | 14,342 | 14,418 | 14,228 | 14,618 |
| Ash..... | 8.02 | 8.21 | 7.98 | 7.43 | 8.50 | 8.93 |
| | Feb. | Mar. | Apr. | May. | June. | Average. |
| Dry coal: | | | | | | |
| British thermal units..... | 14,620 | 14,558 | 14,349 | 14,663 | 14,606 | 14,447 |
| Ash..... | 9.65 | 8.29 | 8.37 | 9.08 | 7.96 | 8.40 |

DIVISION II.—Pumping station and repair shops.

This division has charge of all pumping incident to the distribution system, care of pumping stations and machinery, and all miscellaneous repair work needed in the department.

Total amount of water pumped during the year was as follows:

| | Gallons. |
|--------------------------------------|---------------|
| First high service system..... | 6,292,558,140 |
| Second high service system..... | 1,682,700,000 |
| Third high service system..... | 366,242,000 |
| Total..... | 8,341,500,140 |
| Repumped to fourth high service..... | 9,691,414 |

This is a decrease of about 10 per cent, or approximately of a thousand million gallons, from the total amount pumped during the preceding year. This, especially in view of the fact that the greatest increase in population is undoubtedly in the area under consideration, is most gratifying. It is due in part to the installation of meters and in part to the excellent work of the pitometer division in locating sources of underground waste.

| | | |
|--|-----------|--------------|
| Coal burned..... | tons.. | 4, 290 |
| Water pumped to boilers (under measurement)..... | gallons.. | 10, 101, 000 |
| Cylinder oil used..... | do.... | 1, 815 |
| Engine oil used..... | do.... | 1, 265 |
| Grease used..... | pounds.. | 1, 444 |
| Waste used..... | do.... | 3, 349 |

A very large amount of miscellaneous repair and construction work was done in the blacksmith, machine, carpenter, pipe, and paint shops, all of which is set forth in full detail in the weekly reports on file in this office.

Mr. James T. Fink, chief steam engineer, is in charge of this division.

In conclusion, I desire once more to record my appreciation of the excellent work done by the employees of this department.

Very respectfully, your obedient servant,

W. A. McFARLAND,
Superintendent Water Department.

Capt. WM. KELLY,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner District of Columbia.

TABLE I.—Summary of the distribution system.

| | In service June 30, 1907. | Added dur- ing fiscal year 1908. | Abandoned during fis- cal year 1908. | Total in serv- ice June 30, 1908. |
|------------------------------------|------------------------------|--|---|---|
| 75-inch diameter.....linear feet.. | 600 | | | 600 |
| 48-inch diameter.....do.... | 44, 297 | | | 44, 297 |
| 42-inch diameter.....do.... | 23 | | | 23 |
| 36-inch diameter.....do.... | 59, 446 | | 493 | 58, 953 |
| 30-inch diameter.....do.... | 48, 938 | 212 | 140 | 49, 010 |
| 24-inch diameter.....do.... | 21, 648 | 10 | 246 | 21, 412 |
| 20-inch diameter.....do.... | 47, 689 | 214 | 371 | 47, 532 |
| 16-inch diameter.....do.... | 2, 580 | | | 2, 580 |
| 12-inch diameter.....do.... | 251, 163 | 8, 413 | 2, 999 | 256, 577 |
| 10-inch diameter.....do.... | 9, 267 | | 223 | 9, 044 |
| Total trunk lines.....do.... | 485, 651 | 8, 849 | 4, 472 | 490, 028 |
| 8-inch diameter.....do.... | 181, 929 | 57, 343 | 395 | 238, 877 |
| 6-inch diameter.....do.... | 1, 482, 774 | 5, 018 | 12, 460 | 1, 475, 332 |
| 4-inch diameter.....do.... | 138, 902 | 3, 886 | 2, 684 | 140, 104 |
| 3-inch diameter.....do.... | 71, 997 | 1, 719 | 537 | 73, 179 |
| 2½-inch diameter.....do.... | 242 | | | 242 |
| 2-inch diameter.....do.... | 5, 995 | 424 | 190 | 6, 229 |
| 1½-inch diameter.....do.... | 3, 870 | | | 3, 870 |
| 1-inch diameter.....do.... | 2, 021 | | 20 | 2, 001 |
| Grand total.....do.... | 2, 373, 381 | 77, 239 | 20, 758 | 2, 429, 862 |
| Stop valves..... | 5, 522 | 562 | 182 | 5, 902 |
| Fire hydrants..... | 2, 336 | 93 | 7 | 2, 422 |
| Public hydrants..... | 273 | 12 | 28 | 257 |
| Public fountains..... | 123 | 3 | 2 | 124 |
| Mains lowered.....linear feet.. | | | | 6, 125 |

TABLE II.—Statement showing cost of water mains laid during the fiscal year ending June 30, 1908.

| Locations. | Size. | Length. | Labor. | Material. | Total. |
|---|------------|--------------|----------|-----------|----------|
| | <i>In.</i> | <i>Feet.</i> | | | |
| Alley, square 965..... | 2 | 111.30 | \$43.42 | \$42.84 | \$86.26 |
| Alley, square 238..... | 3 | 95.32 | 36.18 | 107.03 | 143.21 |
| Alley, square 557..... | 3 | 76.20 | 29.25 | 85.54 | 114.79 |
| Alley, square 1020..... | 3 | 246.74 | 102.13 | 264.46 | 366.59 |
| Alley, square 499..... | 3 | 109.70 | 40.00 | 59.32 | 99.32 |
| Alley, square 100..... | 3 | 152.68 | 60.18 | 159.24 | 219.42 |
| Alley, square 543..... | 3 | 59.34 | 28.09 | 43.28 | 71.37 |
| Alley, square 70..... | 3 | 99.23 | 40.50 | 52.92 | 93.42 |
| Alley, square 540..... | 3 | 100.13 | 43.81 | 59.41 | 103.22 |
| Alley, square 3057..... | 4 | 170.64 | 60.00 | 109.71 | 169.71 |
| Alley, square 1188..... | 4 | 21.60 | 6.00 | 31.79 | 37.79 |
| Alley, square 1189..... | 4 | 184.43 | 194.58 | 158.07 | 352.65 |
| Alley, square 583..... | 4 | 315.22 | 135.88 | 392.90 | 528.78 |
| Thirty-fifth street nw., between Prospect and M streets..... | 4 | 208.67 | 100.49 | 236.81 | 337.30 |
| Alley, square 3058..... | 4 | 127.26 | 65.87 | 168.28 | 234.15 |
| Alley, square 2668..... | 4 | 137.04 | 70.19 | 194.97 | 265.16 |
| Alley, square 196..... | 4 | 232.34 | 94.67 | 186.11 | 280.78 |
| Alley, square 3068..... | 4 | 531.06 | 220.63 | 280.87 | 501.50 |
| Keating avenue ne., east from Lincoln road..... | 4 | 240.00 | 114.19 | 101.45 | 215.64 |
| Alley, square 801..... | 4 | 90.77 | 38.88 | 95.98 | 134.86 |
| Alley, square 234..... | 4 | 168.57 | 56.37 | 224.14 | 280.51 |
| Alley, square 653..... | 4 | 212.94 | 61.49 | 132.92 | 194.41 |
| Alley, square 144..... | 4 | 137.29 | 50.75 | 122.35 | 173.10 |
| D street nw., east of Twenty-sixth street..... | 6 | 112.37 | 76.68 | 135.43 | 212.11 |
| Pennsylvania avenue nw., between Twenty-eighth and Twenty-ninth streets..... | 4 | 12.23 | 159.45 | 223.88 | 383.33 |
| Pennsylvania avenue nw., west from Twenty-sixth street..... | 6 | 184.11 | 96.88 | 196.11 | 292.99 |
| D street se., between Sixth and Seventh streets..... | 6 | 652.54 | 352.47 | 1,024.03 | 1,376.50 |
| Intersection of E and South Capitol streets..... | 6 | 100.73 | 59.88 | 95.61 | 155.49 |
| Seventh street ne., south of K street..... | 6 | 135.02 | 79.50 | 88.50 | 188.00 |
| Second street se., between I and K streets..... | 6 | 2.11 | 192.88 | 302.43 | 495.31 |
| K street se., between Second and Fifth streets..... | 8 | 116.78 | 574.30 | 1,279.36 | 1,853.66 |
| Potomac street nw., between M and Prospect streets..... | 8 | 989.22 | | | |
| Seventeenth street se., between East Capitol and C streets; Eighteenth street se., between East Capitol and A streets; Massachusetts avenue se., west from Seventeenth street; A street se., east from Eighteenth street..... | 8 | 259.02 | 208.69 | 443.22 | 651.91 |
| Twenty-first street nw., south from C street..... | 4 | 7.57 | | | |
| First street sw., south from L street..... | 6 | 2.50 | | | |
| One-half street sw., between O street and Georgia avenue..... | 8 | 2,212.65 | 1,314.33 | 2,652.73 | 3,967.06 |
| Evarts street ne., between Twenty-second and Twenty-fourth streets..... | 12 | 19.94 | | | |
| Thirteenth street nw., north from Madison street..... | 20 | 2.56 | | | |
| Newton street nw., between Holmead place and Fourteenth street..... | 30 | 20.05 | | | |
| Lawrence street ne., between Eighteenth and Twenty-second streets..... | 4 | 2.77 | 72.00 | 111.39 | 183.39 |
| G street sw., between One-half and South Capitol streets..... | 8 | 209.72 | | | |
| N street ne., between First and Second streets..... | 6 | 13.72 | 107.95 | 292.87 | 400.82 |
| Seventeenth street nw., north from Kalorama road..... | 8 | 134.35 | | | |
| South Carolina avenue se., between Kentucky avenue and Thirteenth street; Thirteenth street se., north from South Carolina avenue..... | 8 | 1,024.86 | 399.87 | 1,112.87 | 1,512.74 |
| Pennsylvania avenue se., east from Fifteenth street..... | 8 | 551.77 | 281.50 | 581.72 | 863.22 |
| One-half street se., between N and O streets..... | 4 | 9.41 | | | |
| Twenty-fourth street nw., between California avenue and Kalorama road; U street nw., between Twenty-fourth street and Kalorama road; Kalorama road nw., west from Twenty-fourth street..... | 8 | 339.35 | 157.70 | 333.57 | 491.27 |
| Virginia avenue nw., between E and Twenty-second streets..... | 6 | 5.14 | | | |
| Maryland avenue ne., between Tenth and Eleventh streets..... | 8 | 474.46 | 126.38 | 483.00 | 609.38 |
| | 8 | 1,558.87 | 712.75 | 1,500.46 | 2,213.21 |
| | 4 | 5.13 | 78.47 | 161.26 | 239.73 |
| | 8 | 140.09 | 233.89 | 817.70 | 1,051.59 |
| | 8 | 724.28 | | | |
| | 8 | 450.24 | 164.31 | 506.27 | 670.58 |
| | 4 | 11.00 | | | |
| | 8 | 480.56 | 205.38 | 680.65 | 886.03 |
| | 4 | 3.62 | 109.31 | 273.36 | 382.67 |
| | 8 | 245.46 | | | |
| | 8 | 409.00 | 168.62 | 475.91 | 644.53 |
| | 8 | 1,901.26 | 690.79 | 2,089.39 | 2,780.18 |
| | 4 | 2.77 | 81.32 | 232.57 | 313.89 |
| | 8 | 156.17 | | | |
| | 8 | 140.82 | 72.07 | 146.74 | 218.81 |

TABLE II.—Statement showing cost of water mains laid during the fiscal year ending June 30, 1908—Continued.

| Locations. | Size. | Length. | Labor. | Material. | Total. |
|---|-------|----------|----------|-----------|----------|
| | In. | Feet. | | | |
| Elliott street nw., between Forty-first street and Wisconsin avenue..... | 8 | 521.25 | \$203.86 | \$653.32 | \$857.18 |
| Quincy street nw., east from Fourteenth street.. | 4 | 3 01 | 80.88 | 254.00 | 334.88 |
| Naylor street se., between Twenty-third and Twenty-fifth streets..... | 8 | 159.49 | | | |
| Kearney street ne., west from Tenth street..... | 8 | 592.51 | 263.80 | 640.50 | 904.30 |
| Ivy street se., between Canal street and New Jersey avenue; Canal street se., between South Capitol and E streets; South Capitol street se., between Canal and D streets..... | 4 | 2.81 | 49.88 | 148.79 | 198.67 |
| Madison street nw., east from Brightwood avenue. | 8 | 126.04 | | | |
| Nicholson street se., between Prout street and Railroad avenue..... | 6 | 2.00 | 374.70 | 676.64 | 1,051.34 |
| Virginia avenue sw., between Tenth and Eleventh streets..... | 8 | 665.20 | | | |
| Eleventh street nw., north from Park road..... | 8 | 213.40 | 106.92 | 249.71 | 356.63 |
| Ames place ne., between Fourteenth and Fifteenth streets..... | 4 | 2.44 | 148.18 | 158.79 | 306.97 |
| Ontario place nw., west from Ontario road; Ontario road nw., between Eighteenth street and Ontario place..... | 8 | 141.88 | | | |
| Seventh street nw., between Longfellow and Kennedy streets..... | 4 | 2.77 | 85.04 | 289.39 | 374.43 |
| Calvert street nw., between Clifbourne place and Twentieth street..... | 8 | 172.51 | | | |
| Fifteenth street se., north from C street..... | 4 | 2.29 | 103.07 | 221.55 | 324.62 |
| Morrison street nw., between Connecticut avenue and Thirty-seventh street; McKinley street nw., between Connecticut avenue and Thirty-seventh street; Northampton street nw., between Connecticut avenue and Thirty-seventh street; Oliver street nw., between Connecticut avenue and Thirty-seventh street; Thirty-seventh street nw., between Chevy Chase circle and Morrison street; Patterson street nw., between Chevy Chase circle and Morrison street; south side Chevy Chase circle, between Connecticut avenue and Patterson street..... | 6 | 172.61 | | | |
| V street nw., between New Hampshire avenue and Fifteenth street..... | 8 | 5.59 | 78.75 | 348.54 | 427.29 |
| Fourteenth street ne., between North Carolina avenue and A street..... | 8 | 248.11 | | | |
| Bryant street nw., west from North Capitol street; North Capitol street nw., between Bryant and Channing streets..... | 8 | 407.50 | 145.74 | 691.36 | 837.10 |
| Fifteenth street se., south from Pennsylvania avenue; in the minor street in square 1065..... | 8 | 343.67 | 74.75 | 411.84 | 486.59 |
| Brightwood avenue nw., north from Shepherds road..... | 4 | 3.70 | 113.38 | 228.09 | 341.47 |
| Seventh street nw., between Jefferson and Kennedy streets..... | 8 | 209.10 | | | |
| Alley, square 3055..... | 8 | 271.21 | 126.37 | 256.00 | 382.37 |
| Shepherd street nw., between Seventh and Eighth streets..... | 4 | 4.47 | 2,232.23 | 6,931.55 | 9,163.78 |
| Garfield street nw., between Connecticut avenue and Twenty-seventh street..... | 6 | 19.20 | | | |
| South side of Scott circle nw..... | 8 | 6,864.32 | | | |
| Ontario road nw., between Florida avenue and Kalorama road..... | 6 | 12.28 | 142.13 | 331.07 | 473.20 |
| First street sw., between Q and V streets..... | 8 | 213.68 | | | |
| First street nw., south from M street..... | 6 | 4.39 | 112.87 | 338.72 | 451.59 |
| Adams street nw., between North Capitol and First streets..... | 8 | 265.94 | | | |
| Fourteenth street ne., north from B street..... | 8 | 480.32 | 172.82 | 621.19 | 794.01 |
| M street nw., between Twenty-second street and New Hampshire avenue..... | 4 | 7.11 | 130.06 | 412.07 | 542.13 |
| Kennedy street nw., west from Fifth street..... | 8 | 267.73 | | | |
| Rhode Island avenue nw., between Second and Third streets..... | 8 | 125.30 | 56.75 | 153.91 | 210.66 |
| Fifth street nw., south from V street..... | 8 | 443.85 | 117.00 | 438.62 | 555.62 |
| | 8 | 205.80 | 77.44 | 190.96 | 268.40 |
| | 8 | 484.95 | 188.44 | 469.27 | 657.71 |
| | 8 | 603.04 | 217.81 | 738.03 | 955.84 |
| | 4 | 3.30 | 349.27 | 715.29 | 1,064.56 |
| | 6 | 25.70 | | | |
| | 8 | 417.72 | | | |
| | 8 | 169.84 | 91.18 | 235.29 | 326.47 |
| | 6 | 5.55 | 579.25 | 2,552.99 | 3,132.24 |
| | 8 | 2,210.23 | | | |
| | 4 | 5.73 | 86.57 | 182.43 | 269.00 |
| | 8 | 149.10 | | | |
| | 8 | 293.90 | 105.01 | 353.84 | 458.85 |
| | 6 | 5.96 | 115.24 | 393.23 | 508.47 |
| | 8 | 348.78 | | | |
| | 6 | 8.05 | 159.00 | 399.13 | 558.13 |
| | 8 | 325.50 | | | |
| | 4 | 3.02 | 15.50 | 50.98 | 66.48 |
| | 8 | 51.03 | | | |
| | 6 | 18.66 | 216.82 | 543.73 | 760.55 |
| | 8 | 398.85 | | | |
| | 4 | 2.77 | 65.74 | 183.15 | 248.89 |
| | 8 | 166.23 | | | |

TABLE II.—Statement showing cost of water mains laid during the fiscal year ending June 30, 1908—Continued.

| Locations. | Size. | Length. | Labor. | Material. | Total. |
|--|--------------|--------------------------|----------|-----------|----------|
| | <i>In.</i> | <i>Feet.</i> | | | |
| Myrtle avenue ne., between South Dakota and Central avenues..... | 4 8 | 2.77 738.49 | \$231.12 | \$753.90 | \$985.02 |
| Porter street nw., between Wisconsin avenue and Thirty-seventh street; Thirty-seventh street nw., between Porter street and Idaho avenue, Idaho avenue nw., between Thirty-seventh and Ordway streets..... | 8 12 | 846.27 9.23 | 467.24 | 1,078.24 | 1,545.48 |
| Ingraham street nw., between Illinois avenue and Eighth street..... | 4 8 | 3.02 429.05 | 193.12 | 559.81 | 752.93 |
| Hamlin street ne., east from Thirteenth street..... | 4 8 | 2.60 223.30 | 60.31 | 236.76 | 297.07 |
| Wyoming avenue nw., west from Connecticut avenue..... | 8 | 180.40 | 91.50 | 193.33 | 284.83 |
| Massachusetts avenue se., between Thirteenth and A streets..... | 8 | 29.98 | 27.62 | 32.83 | 60.45 |
| Evarts street ne., east from Twenty-fourth street..... | 4 8 | 2.77 134.88 | 58.56 | 174.40 | 232.96 |
| North Capitol street, between Bryant and Channing streets..... | 8 | 386.47 | 146.81 | 392.08 | 538.89 |
| Ames place ne., west from Fifteenth street..... | 6 8 | 4.64 256.73 | 134.23 | 281.74 | 415.97 |
| Macomb street nw., east from Connecticut avenue..... | 8 | 297.32 | 108.75 | 271.72 | 380.47 |
| Rittenhouse street nw., between Fifth and Ninth streets..... | 8 | 1,764.00 | 853.20 | 1,807.45 | 2,660.65 |
| Eighth street nw., south from Randolph street..... | 8 | 145.53 | 48.75 | 239.10 | 287.85 |
| Twenty-second street ne., north from Evarts street..... | 4 8 | 4.88 226.50 | 119.43 | 281.08 | 400.51 |
| A street se., between Massachusetts avenue and Fourteenth street..... | 8 | 84.10 | 39.51 | 86.41 | 125.92 |
| Morrison street nw., west from Connecticut avenue..... | 4 6 8 | 3.91 4.18 163.55 | 46.25 | 204.44 | 250.69 |
| Sixteenth street ne., south from Levis street..... | 4 8 | 2.77 175.40 | 57.82 | 182.97 | 240.79 |
| Kennedy street nw., between Fifth and Seventh streets..... | 8 | 500.30 | 141.31 | 507.86 | 649.17 |
| Fourteenth street nw., between Monroe and Newton streets..... | 8 | 438.24 | 173.88 | 559.75 | 733.63 |
| Twenty-second street ne., between Lawrence and Kearney streets..... | 8 | 376.00 | 189.81 | 474.72 | 664.53 |
| Seventeenth street se., between G and H streets..... | 8 | 335.55 | 100.19 | 364.90 | 465.09 |
| Third street ne., north from L street..... | 8 | 16.33 | 14.50 | 17.88 | 32.38 |
| Warder street nw., between Lamont and Kenyon streets..... | 4 8 | 3.47 228.54 | 81.69 | 251.12 | 332.81 |
| Massachusetts avenue nw., between Fourth and Fifth streets..... | 4 6 8 | 11.53 6.88 122.37 | 93.99 | 249.30 | 343.29 |
| Adams street nw., west from Flagler street..... | 4 6 8 | 2.95 6.75 265.40 | 142.12 | 305.24 | 447.36 |
| Seventh street nw., between Quincy and Randolph streets..... | 8 | 327.22 | 93.57 | 307.11 | 400.68 |
| Cedar street nw., between Fifth street and Blair road..... | 6 8 | 2.47 326.11 | 116.44 | 308.08 | 424.52 |
| Garfield street west, from Wisconsin avenue; Thirty-eighth street nw., south from Garfield street; Fulton street nw., west from Thirty-eighth street..... | 4 8 | 4.04 2,117.49 | 789.99 | 2,404.94 | 3,194.93 |
| Q street ne., between Eckington place and First street; Eckington place ne., between Q and Quincy place..... | 4 8 | 15.78 608.20 | 320.25 | 1,057.41 | 1,377.66 |
| Grounds District of Columbia Pumping Station..... | 6 8 4 | 6.00 655.78 38.05 | 425.87 | 1,075.85 | 1,501.72 |
| Seventeenth street nw., south from D street..... | 6 8 | 10.24 528.55 | 251.28 | 841.13 | 1,092.41 |
| Morse street ne., between West Virginia avenue and Twelfth street..... | 4 8 | 2.94 315.01 | 100.57 | 395.57 | 496.14 |
| Columbia road nw., east from Brightwood avenue..... | 3 8 12 | 4.77 148.23 35.55 | 96.56 | 287.90 | 384.46 |
| Emerson street nw., between Thirteenth street and Brightwood avenue; Brightwood avenue nw., between Emerson and Farragut streets..... | 4 8 12 | 5.82 379.81 772.97 | 425.45 | 1,807.02 | 2,232.47 |
| Brightwood avenue nw., between Randolph and Shepherd streets..... | 6 8 | 3.86 263.72 | 116.13 | 376.95 | 493.08 |
| Idaho avenue nw., north from Woodley road..... | 8 | 470.17 | 75.74 | 411.01 | 486.75 |
| Fifteenth street nw., between V and W streets..... | 6 8 | 5.81 405.54 | 140.59 | 477.12 | 617.71 |

TABLE II.—Statement showing cost of water mains laid during the fiscal year ending June 30, 1908—Continued.

| Locations. | Size. | Length. | Labor. | Material. | Total. |
|--|------------|--------------|-----------|-----------|------------|
| | <i>In.</i> | <i>Feet.</i> | | | |
| Eleventh street nw., south from Fairmont street. | 4 | 2.77 | \$85.06 | \$186.08 | \$271.14 |
| | 8 | 179.02 | | | |
| Eighteenth street ne., between E and Rosedale streets; Rosedale street ne., between Eighteenth and Nineteenth streets. | 2 | 313.00 | 179.26 | 481.34 | 660.60 |
| | 8 | 411.03 | | | |
| Eleventh street nw., north from U street. | 4 | 2.92 | 34.83 | 110.76 | 145.59 |
| | 8 | 81.38 | | | |
| Second street ne., between N street and Florida avenue; M street ne., west of First street; Patterson street ne., between First and Second streets. | 3 | 70.01 | 253.17 | 617.63 | 870.80 |
| | 4 | 2.00 | | | |
| | 6 | 5.74 | | | |
| | 8 | 385.05 | | | |
| Shepherd street nw., between Illinois avenue and Third street; Marlboro place nw., north from Shepherd street; Third street nw., north from Shepherd street. | 4 | 3.32 | 394.82 | 1,478.52 | 1,873.34 |
| | 8 | 1,305.33 | | | |
| Q street se., between South Capitol and One-half streets; One-half street se., between Q and R streets. | 8 | 559.22 | 239.43 | 679.52 | 918.95 |
| | 4 | 7.00 | | | |
| Eighteenth street, between E and K streets nw. | 6 | 66.18 | 997.03 | 2,990.36 | 3,987.39 |
| | 12 | 1,151.40 | | | |
| Emerson street, between Thirteenth and Fourteenth streets nw. | 8 | 12.56 | 430.09 | 1,584.62 | 2,015.31 |
| | 12 | 1,007.56 | | | |
| Sixteenth street, north from Spring place nw., to Fourteenth street road. | 12 | 1,280.39 | 774.95 | 1,406.71 | 2,181.66 |
| North Carolina avenue se., between Tenth and Eleventh streets. | 12 | 383.60 | 228.75 | 853.63 | 1,082.38 |
| | 4 | 25.97 | | | |
| | 6 | 271.97 | | | |
| Connections and blow-offs in various locations. | 8 | 60.76 | 2,648.49 | 2,503.64 | 5,152.13 |
| | 12 | 787.04 | | | |
| | 20 | 86.40 | | | |
| | 24 | 6.90 | | | |
| Fire hydrants erected in original locations in various sections. | 4 | 6.81 | 1,173.50 | 3,250.50 | 4,424.00 |
| | 6 | 256.84 | | | |
| | 8 | 634.14 | | | |
| | 12 | 5.08 | | | |
| Unfinished water mains June 30, 1907. | | | 60.77 | 2,084.73 | 2,145.50 |
| Unfinished water mains June 30, 1908. | | | 730.44 | | |
| Total. | | 62,372.54 | 30,462.71 | 78,500.55 | 108,963.26 |
| Superintendence and engineering, 5 per cent on total cost. | | | 5,448.16 | | 5,448.16 |
| Aggregate cost. | | | 35,910.87 | 78,500.55 | 114,411.42 |

TABLE III.—Statement of length and cost of water mains laid from July 1, 1878, to June 30, 1908.

| Fiscal year. | 48-inch. | 42-inch. | 36-inch. | 30-inch. | 24-inch. | 20-inch. | 16-inch. | 12-inch. | 10-inch. | 8-inch. |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> |
| 1878 | | | 40 | | | | | 3,719 | | |
| 1879 | | | | | | | | 7,409 | | |
| 1880 | | | | | | | | | | |
| 1881 | | | | | | | | | | |
| 1882 | | | | | | | | | | |
| 1883 | | | | | | | | 1,625 | | 26 |
| 1884 | | | | | | | | 1,038 | | |
| 1885 | | | | | | | | 763 | | |
| 1886 | | | | | | | | 1,938 | 701 | |
| 1887 | | | | | | 4,835 | | 1,124 | 2,998 | |
| 1888 | | | | | | | | 731 | | |
| 1889 | | | | | 2,312 | 5,140 | | 5,626 | 2,784 | |
| 1890 | | | | | | | | | | |
| 1891 | | | | | | | | 5,201 | | |
| 1892 | | | | | | 2,926 | 2,500 | 10,165 | | |
| 1893 | | | | | | | | 6,473 | | |
| 1894 | | | | | | 278 | | 39,386 | | |
| 1895 | | | | | 6,617 | | | 27,731 | | |
| 1896 | | | | | 294 | 8,874 | | 11,873 | | |
| 1897 | | | | | | 2,180 | | 6,877 | | |
| 1898 | | | | | | | | 7,698 | | 907 |
| 1899 | | | | | | 1,914 | | 2,220 | | |
| 1900 | | | 10,902 | | 35 | 1,282 | 48 | 167 | | |
| 1901 | | | | | | | | 10,025 | | |
| 1902 | | | | 1,227 | | 203 | | 14,010 | | |
| 1903 | 2,123 | | 14,601 | | | 35 | | 9,411 | | |
| 1904 | 4,019 | 23 | 5,231 | 6,332 | 18 | 8,668 | 24 | 13,802 | 68 | 40,767 |
| 1905 | | | 2,701 | 9 | 42 | | | 1,014 | | 31,750 |
| 1906 | 8,155 | | 97 | | 40 | 716 | | 3,985 | | 34,880 |
| 1907 | | | 2,697 | 3,650 | 4 | | 48 | 12,066 | 6 | 55,798 |
| 1908 | | | | 20 | 10 | 98 | | 5,513 | | 50,428 |
| Total..... | 14,297 | 23 | 36,269 | 11,238 | 9,372 | 37,149 | 2,620 | 211,579 | 6,647 | 214,556 |

| Fiscal year. | 6-inch. | 4-inch. | 3-inch. | 2½-inch. | 2-inch. | 1½-inch. | 1¼-inch. | Total. | Total cost. |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | |
| 1878 | 12,781 | 30 | | | | | | 16,570 | \$14,846.20 |
| 1879 | 8,516 | 1,397 | | | | | | 17,322 | 19,436.03 |
| 1880 | 3,024 | | | | | | | 3,024 | |
| 1881 | 3,709 | | | | | | | 3,709 | 3,110.70 |
| 1882 | 1,920 | | | | | | | 1,920 | 1,626.43 |
| 1883 | 4,084 | | | | | | | 5,735 | 8,073.70 |
| 1884 | 8,972 | | | | | | | 10,010 | 10,492.51 |
| 1885 | 27,766 | 358 | 485 | | | | | 29,372 | 25,865.35 |
| 1886 | 35,192 | | 6,623 | | | | | 44,544 | 40,025.10 |
| 1887 | 30,041 | 292 | 7,124 | | | | | 46,414 | 56,951.00 |
| 1888 | 9,123 | 9,148 | 3,937 | | | | | 22,939 | 17,626.63 |
| 1889 | 36,742 | 6,571 | 8,753 | | | | | 67,928 | 79,342.16 |
| 1890 | 34,737 | 2,856 | 2,855 | | | | | 40,448 | 19,113.54 |
| 1891 | 56,893 | 3,142 | 11,013 | | | | | 76,249 | 49,702.65 |
| 1892 | 88,709 | 3,342 | 1,286 | | | | | 108,926 | 74,733.04 |
| 1893 | 54,173 | 8,336 | 3,458 | | | | | 72,440 | 56,339.39 |
| 1894 | 86,632 | 12,832 | 2,918 | | | | | 142,046 | 126,599.55 |
| 1895 | 103,785 | 5,442 | 2,733 | | | | | 146,308 | 134,502.31 |
| 1896 | 61,464 | 1,738 | 3,262 | | | | | 87,505 | 89,395.12 |
| 1897 | 71,266 | 10,595 | 992 | | | | | 94,014 | 77,954.81 |
| 1898 | 52,371 | 6,735 | 2,790 | | 1,033 | 2,104 | | 72,634 | 48,661.70 |
| 1899 | 84,291 | 4,662 | 2,701 | | 79 | 133 | | 96,000 | 65,774.52 |
| 1900 | 53,838 | 4,211 | 2,116 | | 17 | 453 | | 73,059 | 114,784.72 |
| 1901 | 52,018 | 2,187 | 935 | | | 646 | | 65,812 | 47,426.71 |
| 1902 | 35,481 | 1,414 | 1,632 | 242 | | | | 54,209 | 57,676.33 |
| 1903 | 32,264 | 2,004 | 357 | | | | 1,045 | 61,480 | 98,498.90 |
| 1904 | 2,913 | 1,745 | 1,637 | | 1,397 | | | 86,644 | 404,294.81 |
| 1905 | 1,228 | 578 | 2,671 | | | | | 39,993 | 73,402.12 |
| 1906 | 551 | 781 | 722 | | | | | 50,903 | 176,297.98 |
| 1907 | 2,209 | 3,081 | 869 | | 580 | | | 81,008 | 197,066.91 |
| 1908 | 3,279 | 3,089 | 1,016 | | 424 | | | 63,877 | 114,411.42 |
| Total..... | 1,059,972 | 96,566 | 72,885 | 242 | 4,130 | 3,836 | 2,021 | 1,783,402 | 2,304,032.34 |

TABLE IV.—Average cost per foot for laying water mains of various sizes (excluding repairs to improved pavements) during the fiscal year ending June 30, 1908.

| | Linear feet. | Cost for labor. | Cost for material. | Total. |
|--------------|--------------|-----------------|--------------------|---------|
| 2-inch..... | 111 | \$0.391 | \$0.386 | \$0.777 |
| 3-inch..... | 939 | .398 | .440 | .838 |
| 4-inch..... | 2,778 | .457 | .645 | 1.102 |
| 6-inch..... | 1,432 | .576 | .865 | 1.441 |
| 8-inch..... | 49,079 | .413 | 1.125 | 1.538 |
| 12-inch..... | 3,908 | .618 | 1.580 | 2.198 |

TABLE V.—Statement of the length and cost of water mains laid for the extension of the high-service system of water distribution from July 1, 1903, to June 30, 1908.

| | Laid to June 30, 1907. | Laid during fiscal year 1908. | Total in service June 30, 1908. |
|--|------------------------|-------------------------------|---------------------------------|
| 1½-inch.....linear feet.. | 2,021 | ..... | 2,021 |
| 1½-inch.....do..... | 2,717 | ..... | 2,717 |
| 2-inch.....do..... | 1,675 | 424 | 2,099 |
| 3-inch.....do..... | 6,225 | 1,016 | 7,241 |
| 4-inch.....do..... | 11,704 | 3,089 | 14,793 |
| 6-inch.....do..... | 218,958 | 3,279 | 222,237 |
| 8-inch.....do..... | 132,483 | 50,428 | 182,911 |
| 10-inch.....do..... | 74 | ..... | 74 |
| 12-inch.....do..... | 134,880 | 5,513 | 140,393 |
| 16-inch.....do..... | 120 | ..... | 120 |
| 20-inch.....do..... | 24,151 | 98 | 24,249 |
| 24-inch.....do..... | 7,051 | 10 | 7,061 |
| 30-inch.....do..... | 11,218 | 20 | 11,238 |
| 36-inch.....do..... | 36,229 | ..... | 36,229 |
| 42-inch.....do..... | 23 | ..... | 23 |
| 48-inch.....do..... | 14,297 | ..... | 14,297 |
| Total..... | 603,826 | 63,877 | 667,703 |
| Total cost to June 30, 1907..... | | | 1,343,557.03 |
| Total cost for the fiscal year ending June 30, 1908..... | | | 114,411.42 |
| Aggregate cost to June 30, 1908..... | | | 1,457,968.45 |

TABLE VI.—District pumping station—pumpage by months.

| | Quantity. | | Quantity. |
|---|-------------|---------------|---------------|
| 1907. | Gallons. | 1908. | Gallons. |
| July..... | 772,386,100 | January..... | 689,519,000 |
| August..... | 737,184,600 | February..... | 723,487,940 |
| September..... | 718,731,900 | March..... | 673,478,750 |
| October..... | 717,980,840 | April..... | 648,916,840 |
| November..... | 639,637,050 | May..... | 660,908,500 |
| December..... | 680,949,880 | June..... | 678,318,740 |
| Total pumpage for the fiscal year ending June 30, 1908..... | | | 8,341,500,140 |

TABLE VII.—Statement of the number of shallow and deep wells.

| | Shallow wells. | Deep wells. | Total. |
|---|----------------|-------------|--------|
| Total number in service June 30, 1907..... | 65 | 33 | 98 |
| Closed and discontinued during the year ending June 30, 1908..... | 54 | 2 | 56 |
| Total number in service June 30, 1908..... | 11 | 31 | 42 |

TABLE VIII.—Statement showing in detail the number of draftsmen, levelers, rodmen, and inspectors temporarily employed in connection with the water department on work authorized by appropriation for the water department for the year ending June 30, 1908. (Sec. 4, act making appropriation for the water department, approved March 2, 1907.)

| No. | Designation. | Per diem. | Amount. |
|-----|-----------------|-----------|------------|
| 4 | Inspectors..... | \$4.50 | \$3,492.62 |
| 1 | Draftsman..... | 4.50 | 668.25 |
| 1 | Do..... | 5.00 | 677.50 |
| | Total..... | | 4,838.37 |

TABLE IX.—Statement of money expenditures of the water department for the year ending June 30, 1908.

| | | |
|--|-------------|-------------|
| Appropriation for salaries, act March 2, 1907..... | \$88,266.00 | |
| Repayments to the appropriation..... | 1,389.29 | |
| | | \$89,655.29 |
| Disbursements for services..... | | 84,647.55 |
| Unexpended balance June 30, 1908..... | | 5,007.74 |
| Appropriation for general expenses, act March 2, 1907..... | 42,000.00 | |
| Repayments to the appropriation..... | 13.20 | |
| | | 42,013.20 |
| Disbursements for services..... | 24,103.96 | |
| Disbursements for material purchased..... | 16,234.62 | |
| Outstanding liabilities June 30, 1908..... | 1,246.95 | |
| | | 41,585.53 |
| Unexpended balance June 30, 1908..... | | 427.67 |
| Appropriation for the high-service system, act March 2, 1907, "so much as may be available in the water fund after pro- viding for the annual appropriations"..... | 459,153.00 | |
| Repayments to the appropriation..... | 46,360.25 | |
| | | 505,513.25 |
| Disbursements for services..... | 192,736.33 | |
| Disbursements for material..... | 293,777.35 | |
| Water taxes refunded..... | 1,441.00 | |
| Outstanding liabilities June 30, 1908..... | 8,553.95 | |
| | | 496,508.63 |
| Unexpended balance June 30, 1908..... | | 9,004.62 |
| Appropriation for contingent expenses, act March 2, 1907..... | | 3,000.00 |
| Disbursements for material..... | 2,907.80 | |
| Outstanding liabilities June 30, 1908..... | 81.52 | |
| | | 2,989.32 |
| Unexpended balance June 30, 1908..... | | 10.68 |
| Summary of money expenditures for the year 1908: | | |
| Appropriation for salaries..... | 84,647.55 | |
| Appropriation for general expenses..... | 41,585.53 | |
| Appropriation for high service..... | 496,508.63 | |
| Appropriation for contingent expenses..... | 2,989.32 | |
| Total..... | | 625,731.03 |

TABLE X.—Statement of operating expenditures of the water department for the year ending June 30, 1908.

| | | |
|------------------------------------|--------------|---------------------|
| Pay rolls..... | \$301,444.14 | |
| Material expended..... | 294,457.70 | |
| | | <u>\$595,901.84</u> |
| Expended on account of— | | |
| Operating and maintenance..... | 268,370.72 | |
| Current repairs..... | 53,302.84 | |
| New work (extension of plant)..... | 274,228.28 | |
| | | <u>595,901.84</u> |
| Expenditures for year 1907..... | | <u>520,193.29</u> |
| Excess for the year 1908..... | | 75,708.55 |

The length of water mains in use June 30, 1908, was 2,429,862 feet, or 460.2 miles.

The total length of water mains laid during the year 1908 was 77,239 feet, or 14.62 miles. Of this amount there were laid for the extension and betterment of the department system 63,877 feet, at a cost of \$114,411.42; and for deposit and railway work 13,362 feet were laid.

During the year there were erected in new locations 93 fire hydrants, 12 public hydrants, 3 public fountains. Fifty-four shallow wells and 2 deep wells were closed, leaving in service at the close of the year 11 shallow and 31 deep wells.

Cost of operating pumping engines at the district pumping station:

| | |
|---|-------------|
| Wages of steam engineers, firemen, oilers, etc..... | \$18,570.04 |
| Material, including the cost of coal..... | 19,887.65 |

| | |
|------------|-----------|
| Total..... | 38,457.69 |
|------------|-----------|

Total pumpage for the year 1908 was 8,341,500,140 gallons.

Average cost for pumpage per 1,000 gallons, \$0.00461.

REPORT OF WATER REGISTRAR.

WASHINGTON, September 22, 1908.

SIR: I have the honor to submit the annual report of the revenue and inspection branch of the water department, showing in detail the work accomplished during the fiscal year ended June 30, 1908.

OFFICE WORK.

| | |
|--|--------------|
| Accounts audited..... | 73,378 |
| Accounts posted and checked..... | 73,378 |
| Cards indexed..... | 7,070 |
| Cash receipts posted..... | \$547,507.95 |
| Checking bills on agents' lists..... | 23,530 |
| Classification of premises for water-rent charges..... | 47,105 |
| Compiling real-estate lists..... | 20,016 |
| Coupons assorted..... | 413,520 |
| Curb-cock and box locations recorded..... | 2,182 |
| Curb cocks issued..... | 1,819 |
| Cut-off orders made and recorded..... | 1,941 |
| Cut-off and turn-on orders filed..... | 3,565 |
| Delinquent water-rent notices made and compared..... | 12,048 |
| Delinquent water-rent lists made and checked..... | 1,264 |
| Drawings, plats, or designs made..... | 892 |
| Emergency examinations made..... | 1,094 |
| Examinations of records for private services..... | 86 |
| Examinations of service pipes recorded..... | 1,366 |
| Files indorsed and returned..... | 467 |
| Files received and abstracts made..... | 467 |
| Files indexed..... | 467 |
| House-to-house examinations recorded..... | 54,599 |
| House-to-house examination reports checked..... | 865 |
| House-to-house leaks found and recorded..... | 16,265 |
| Letters and cards received..... | 2,914 |
| Letters and cards sent out..... | 6,400 |

| | |
|--|---------|
| Letters copied..... | 6, 400 |
| Letters filed..... | 2, 914 |
| Letters indexed..... | 6, 400 |
| Meter accounts opened, new..... | 4, 339 |
| Meter bills made and checked..... | 43, 887 |
| Meter accounts computed..... | 86, 007 |
| Meter account computations checked..... | 43, 887 |
| Meter index cards made, new..... | 11, 187 |
| Meter cards checked..... | 22, 291 |
| Meter locations entered and checked..... | 5, 558 |
| Meter tests received and recorded..... | 2, 269 |
| Notice of leaks to agents, etc..... | 5, 173 |
| Numbers given alley houses, squares..... | 449 |
| Numbers placed on alley houses..... | 748 |
| Numbers put on plats, alley houses, squares..... | 829 |
| Permits for use of fire hydrants..... | 72 |
| Permits for use of water for building purposes..... | 624 |
| Plats made of house locations..... | 2, 741 |
| Plumbers' permits examined and approved..... | 2, 298 |
| Posting changes on meter accounts..... | 345 |
| Posting changes on schedule accounts..... | 2, 353 |
| Premises in which leaks were found..... | 10, 894 |
| Record cards made..... | 18, 198 |
| Refunds of duplicate and erroneous payments..... | 133 |
| Repairs to service pipes recorded..... | 2, 659 |
| Reports made, weekly..... | 52 |
| Requests for water-rent bills indexed and filed..... | 1, 407 |
| Requisitions made..... | 30 |
| Routing of meter accounts by squares..... | 16, 641 |
| Schedule accounts brought down for the fiscal year 1909..... | 47, 630 |
| Schedule accounts opened, new..... | 1, 713 |
| Schedule bills made and checked..... | 62, 917 |
| Second examinations of house-to-house leaks recorded..... | 12, 795 |
| Special examination recorded..... | 22, 548 |
| Taps issued..... | 1, 709 |
| Tap records entered..... | 1, 288 |
| Transfer of tap records from books to card system..... | 20, 829 |
| Tap locations recorded..... | 3, 530 |
| Transfer of records from subscription book..... | 1, 709 |
| Turn-on orders made and recorded..... | 1, 624 |
| Vacant houses listed..... | 1, 116 |
| Water-main measurements given to plumbers..... | 3, 471 |

FIELD WORK, GENERAL.

| | |
|---|---------|
| Cut off by request..... | 1, 806 |
| Cut off for nonpayment, schedule accounts..... | 480 |
| Cut off for nonpayment, meter accounts..... | 122 |
| Delinquent water-rent notices served by inspectors..... | 6, 304 |
| House-to-house examinations..... | 54, 599 |
| Meter bills delivered by inspectors..... | 13, 965 |
| New water services inspected..... | 1, 715 |
| Repairs to water services, etc., inspected..... | 2, 659 |
| Schedule bills delivered by inspectors..... | 34, 063 |
| Special examinations, ratings..... | 22, 548 |
| Taps inserted in water mains..... | 2, 169 |
| Turned on by request..... | 1, 438 |
| Water-main tax notices delivered by inspectors..... | 3, 236 |

LEAKS AND WASTES.

| | |
|--|---------|
| Abandoned water services cut off at tap in main..... | 771 |
| Cut off for leaks..... | 794 |
| Cut off for vacancy..... | 253 |
| Locating stop-cock boxes..... | 562 |
| Second examinations of house-to-house leaks..... | 16, 265 |
| Special leak examinations..... | 23, 128 |
| Tracing leaks to determine their source..... | 4, 539 |

WATER METERS.

| | |
|--|------------|
| Meters read..... | 86,007 |
| Taken out for test and repair..... | 166 |
| Taken out, meters burst..... | 5 |
| Taken out for nonregistration..... | 120 |
| Taken out at request of consumer for test..... | 16 |
| Installed after test and repairs..... | 307 |
| Clock works taken out and replaced..... | 6 |
| New glasses placed..... | 137 |
| Lids replaced..... | 20 |
| Leaks at couplings repaired..... | 1 |
| Lowered in pits..... | 60 |
| Raised in pits..... | 44 |
| Repaired in place..... | 16 |
| Meter pits cleaned out..... | 97 |
| Meter pit covers repaired..... | 4 |
| Meter pit lids set..... | 1 |
| Meter pits lowered..... | 4 |
| Meter pits raised..... | 44 |
| Meter pit tops and frames removed and replaced..... | 18 |
| New bolts placed in pit covers..... | 11 |
| The above repairs, etc., of meters is for the period January 22, 1908, to June 30, 1908. | |
| Cost of maintenance for the above period..... | \$1,453.29 |

SERVICE PIPES, ETC.

| | |
|--------------------------------------|-----|
| Brick sidewalks repaved..... | 130 |
| Leaks in service pipes repaired..... | 20 |
| Repairs made to parking..... | 50 |
| Service pipes lowered..... | 6 |
| Service pipes repaired..... | 3 |
| Service pipes replaced..... | 3 |
| Stop cocks replaced..... | 6 |
| Stop-cock boxes raised..... | 2 |
| Valve on service pipe replaced..... | 1 |

GENERAL.

The work of the revenue and inspection branch of the water department has shown an increase of about 33½ per cent over last year. The actual clerical force of the office being unable to cope with the conditions, it was necessary, as in former years, to detail inspectors to office duties, thus curtailing the outside force on necessary field work.

LEAKS AND WASTES.

The records show that out of 54,599 premises visited there were 16,265 leaks found.

The above does not include what is termed "special leaks;" that is, leaks reported to the office by parties other than its inspectors. This character of leaks are given the right of way, and in many instances the conditions are such that damage might result if not checked immediately.

SERVICE CONNECTIONS.

One thousand seven hundred and nine new service connections were made, inspected, and locations recorded during the year. Two thousand six hundred and fifty-nine repairs, etc., to water services and their appurtenances were inspected and recorded.

WATER METERS.

Four thousand three hundred and thirty-nine water meters were installed during the year, making the total number now in use 12,606.

Eighty-six thousand and seven meters were read during the year, making an average reading on each meter of about seven times a year.

Meters for all large consumers are read weekly. By this means a meter that requires repairs is soon detected and a new one substituted, thereby eliminating to a large extent the necessity of rendering estimated bills.

CARD-RECORD SYSTEM.

There are now about 150,000 records and accounts kept in this manner.

With the exception of some old tap books all the records of the office have been brought under the card system, which has proved most satisfactory, particularly so in view of the adoption of a new scheme whereby the possibility of misplacing cards is reduced to a minimum. In relation to the tap records referred to above, the work of transferring them from their present cumbersome form to the cards has been in progress for some time and is now nearing completion. *

ACCOUNTS.

In the past year, in order to secure a greater degree of accuracy and to fix the responsibility for errors, all accounts were carefully examined at different periods throughout the year by clerks detailed for that purpose. This system has proved most satisfactory.

CLASSIFICATION OF PREMISES FOR WATER-RENT CHARGES.

A compilation of all premises in the District of Columbia has been made during the year, which shows the number of business houses and the character of business carried on in each premises. (See Table 4.)

CONDITION OF THE WORK.

While the work of the office shows a large increase over that of last year, and greatly in excess of any previous one, yet at the close of business of the fiscal year it was up to date.

This result was largely obtained by the hearty cooperation of the employees, of whose faithful services I here desire to record my appreciation.

Very respectfully, your obedient servant,

GEO. W. WALLACE,
Water Registrar.

The SUPERINTENDENT, WATER DEPARTMENT.

TABLE 1.—Statement of collections.

| | | | | |
|--------------------------------|--------------|--|--|--------------|
| Water rents: | | | | |
| Schedule..... | \$301,791.71 | | | |
| Meters..... | 175,514.93 | | | |
| | | | | \$477,306.64 |
| Water-main assessments..... | | | | 57,462.39 |
| Taps and stopcocks..... | | | | 8,688.10 |
| Building purposes..... | 2,674.58 | | | |
| Sale of old material, etc..... | 1,376.24 | | | |
| | | | | 4,050.82 |
| | | | | 547,507.95 |

TABLE 2.—Comparative statement of revenues.

| Fiscal year. | Water rents. | Water-main assessment. | Taps and stopcocks. | Miscellaneous. | Total revenues. |
|-------------------------|--------------|------------------------|---------------------|----------------|-----------------|
| 1898..... | \$264,784.48 | \$58,152.56 | \$6,910.65 | \$1,104.42 | \$330,952.11 |
| 1899..... | 276,065.54 | 62,937.43 | 6,327.00 | 1,545.15 | 346,875.12 |
| 1900..... | 286,257.63 | 53,420.70 | 5,208.15 | 4,452.53 | 349,339.01 |
| 1901..... | 303,557.19 | 56,359.72 | 6,140.85 | 3,064.39 | 369,122.15 |
| 1902..... | 318,404.39 | 65,962.47 | 6,368.16 | 4,659.00 | 395,394.02 |
| 1903..... | 326,789.26 | 70,880.32 | 6,787.77 | 3,628.18 | 408,085.53 |
| 1904..... | 340,131.72 | 51,575.87 | 6,522.67 | 2,839.66 | 401,069.92 |
| 1905..... | 349,264.26 | 32,192.77 | 8,693.80 | 5,737.69 | 395,798.52 |
| 1906..... | 359,699.35 | 34,352.70 | 9,100.00 | 2,633.85 | 405,785.90 |
| 1907..... | 466,452.19 | 51,313.97 | 9,487.10 | 8,697.66 | 538,950.92 |
| 1908..... | 477,306.64 | 57,462.39 | 8,688.10 | 4,050.82 | 547,507.95 |
| 1909 ^a | 478,000.00 | 60,000.00 | 8,000.00 | 4,000.00 | 550,000.00 |
| 1910 ^a | 483,000.00 | 60,000.00 | 8,000.00 | 4,000.00 | 555,000.00 |

^a Estimated.

TABLE 3.—*Water meters.*

| Make. | $\frac{1}{2}$ in. | $\frac{3}{4}$ in. | $\frac{1}{2}$ in. | 1 in. | 1 $\frac{1}{2}$ in. | 1 $\frac{1}{2}$ in. | 2 and 2 $\frac{1}{2}$ in. | 3 in. | 4 in. | 6 in. | 8 in. | 12 in. | Total. |
|-----------------------------------|-------------------|-------------------|-------------------|-------|---------------------|---------------------|------------------------------|-------|-------|-------|-------|--------|--------|
| American..... | | 47 | | | | | | | | | | | 47 |
| Crown..... | 1 | 5 | 12 | 37 | | 31 | 18 | 9 | | 3 | | | 116 |
| Davis..... | | | 1 | | | | | | | | | | 1 |
| Detector (fire service)..... | | | | | | | | 1 | | 1 | 1 | | 3 |
| Empire..... | | 50 | | | | | | 1 | 1 | | | | 52 |
| Gem..... | | | | | | | 30 | 22 | 9 | | 2 | | 63 |
| Hersey..... | | 7,374 | 185 | 15 | | 13 | 7 | 2 | 1 | 1 | | | 7,598 |
| King..... | | 45 | | | | | | | | | | | 45 |
| Lambert..... | | 47 | 118 | 60 | | 49 | 26 | 4 | 3 | 1 | | | 308 |
| Nash..... | 6 | 22 | 534 | 456 | | 249 | 117 | 24 | 7 | 2 | | | 1,417 |
| Niagara..... | | | 3 | 2 | | 4 | 3 | | | | | | 12 |
| Pittsburg disk (Keystone)..... | | 50 | 32 | 41 | 2 | 23 | 16 | 17 | 1 | | | | 182 |
| Standard..... | | 1 | 11 | 8 | | 9 | 1 | 1 | | | | | 31 |
| Thomson..... | 3 | 2 | 82 | 82 | | 53 | 29 | 5 | 3 | | | | 259 |
| Trident..... | | 2,072 | 3 | 6 | | 2 | | 5 | 1 | | | | 2,089 |
| Union..... | | | 40 | 44 | | 12 | 11 | 1 | 1 | | 2 | 1 | 112 |
| Worthington..... | | 231 | | 5 | | 4 | 19 | 11 | 1 | | | | 271 |
| Registers..... | | | | | | | | | | | | | 5 |
| Total..... | 10 | 9,946 | 1,021 | 756 | 2 | 449 | 277 | 103 | 28 | 8 | 5 | 1 | 12,611 |

TABLE 4.—*Miscellaneous unmetered business premises and revenue derived therefrom.*

| Character. | Number. | Revenue. | Character. | Number. | Revenue. |
|---------------------------------------|---------|-------------|---|---------|------------|
| Apartment houses..... | 1,649 | \$16,668.80 | Horses..... | 5,950 | \$4,039.24 |
| Bakeries..... | 39 | 178.50 | Laundries..... | 163 | 363.89 |
| Barber shops..... | 145 | 1,272.92 | Mills..... | 1 | 5.00 |
| Barrooms and restaurants..... | 43 | 861.00 | Motor vehicles..... | 232 | 170.81 |
| Billiard and pool rooms..... | 53 | 249.84 | Office buildings..... | 93 | 1,325.30 |
| Boarding schools..... | 5 | 57.65 | Offices..... | 283 | 683.14 |
| Boathouses..... | 2 | 30.00 | Printing houses..... | 8 | 129.00 |
| Churches..... | 8 | 162.00 | Photograph galleries..... | 28 | 178.08 |
| Clubhouses..... | 2 | 24.00 | Shops..... | 823 | 940.27 |
| Clubrooms..... | 6 | 39.00 | Stables, domestic purposes over same..... | 111 | 347.04 |
| Colleges—law, medical, etc..... | 3 | 33.00 | Stationary engines..... | 14 | 112.75 |
| Confectioneries..... | 1 | 6.00 | Stores..... | 2,966 | 9,121.75 |
| Cows..... | 44 | 9.85 | Warehouses..... | 55 | 263.86 |
| Dairies..... | 52 | 188.58 | Miscellaneous accounts not enumerated on schedule..... | 185 | 1,543.65 |
| Dyehouses..... | 8 | 28.50 | | | |
| Eating houses and lunch rooms..... | 279 | 792.65 | Total..... | 13,284 | 40,864.95 |
| Florists..... | 9 | 48.00 | | | |
| Gas engines..... | 24 | 190.88 | | | |

REPORT OF THE SUPERINTENDENT OF SEWERS.

WASHINGTON, September 16, 1908.

SIR: I have the honor to submit the following report of the operations of the sewer division for the fiscal year ended June 30, 1908:

MAINTENANCE.

Under the appropriation for cleaning and repairing sewers and basins the following-described work was performed:

Cleaned:

| | | |
|-----------------------------------|---------------|--------|
| Main sewers..... | feet.. | 13,723 |
| Pipe sewers..... | do.... | 84,914 |
| Catch-basins..... | number.. | 40,866 |
| Catch-basin outlets..... | do.... | 58 |
| Manholes flushed and cleaned..... | do.... | 6,093 |
| Gravel basins cleaned..... | do.... | 12 |
| Sumps cleaned..... | do.... | 8 |
| Street detritus removed..... | cubic yards.. | 10,271 |

Repaired:

| | | |
|--|-------------|-----|
| Pipe sewers relaid (includes basin connections)..... | feet..... | 661 |
| Basins reconstructed and repaired..... | number..... | 30 |
| Basins abandoned..... | do..... | 8 |
| Basin outlets repaired..... | do..... | 9 |
| Basin tops replaced (bluestone and artificial)..... | do..... | 40 |
| Manholes constructed..... | do..... | 4 |
| Manholes repaired..... | do..... | 43 |
| Manholes abandoned..... | do..... | 2 |
| Cast-iron covers replaced..... | do..... | 72 |
| Alley grates and frames replaced..... | do..... | 18 |
| Bulkheads constructed in sewers..... | do..... | 2 |
| Flushing basins repaired..... | do..... | 2 |
| Depressions over sewers filled..... | do..... | 43 |
| Total number of jobs performed..... | do..... | 755 |

Cost:

| | |
|---|------------|
| Cleaning main sewers..... | \$2,668.10 |
| Cleaning pipe sewers..... | 2,675.07 |
| Repairing main sewers..... | 8,330.02 |
| Repairing pipe sewers (includes basin connections)..... | 1,556.34 |
| Cleaning catch-basins..... | 9,112.81 |
| Cleaning gravel basins..... | 188.50 |
| Cleaning sumps..... | 27.64 |
| Manual flushing of sewers..... | 1,835.48 |
| Reconstructing basins and replacing basin tops..... | 2,141.95 |
| Abandoning basins..... | 50.61 |
| Constructing manholes..... | 303.00 |
| Adjusting and repairing manholes..... | 888.87 |
| Abandoning manholes..... | 42.12 |
| Replacing cast-iron covers and alley grates and frames..... | 546.15 |
| Filling depressions over sewers..... | 218.21 |

The arch of the 30-foot span, Tiber sewer, in Canal street between South Capitol and First streets west, was reinforced by concrete column and steel girder concrete construction for a length of 1,170 linear feet, the cost of which was \$6,677.58, or an average of \$5.71 per linear foot.

On the outlet section of the Rock Creek and B street interceptor, in Twenty-seventh and G streets NW., 49 linear feet of 6-foot diameter circular sewer was reconstructed and a façade wall on the same at the bulkhead line replaced at a cost of \$1,652.44.

The outlet channel from the 22-foot span, northeast boundary sewer, at Twenty-first and A streets NE., was improved by a double line of sheet piling in front of the façade wall of this sewer.

The operation of the sewerage pumping station for the fiscal year required the removal of 87,258 pounds of solid materials from the screens and about 30,000 cubic feet of sand, gravel, and detritus from the sediment chamber.

During the year one gang was employed on the work of flushing sewers, two gangs in cleaning catch-basins, one gang on minor repairs on sewers and basins, and one gang cleaning conduits, sediment chamber, and trunk lines of the sewage-disposal system.

MAIN AND PIPE SEWERS.

Under contract sewers were constructed in Twentieth street between M street and New Hampshire avenue and in Seventh street NE. between Massachusetts avenue and East Capitol street. New sewers were constructed under contract in South Capitol street between E and G streets, connecting this section with the sewage-disposal system and replacing the old drainage to the James Creek Canal. Also the sewer in the west side of the James Creek Canal between N street and Washington Barracks and in P street from the canal to Delaware avenue was under construction under contract No. 4090.

By day labor there were constructed pipe sewers aggregating 1,916 linear feet in length, varying in size from 10 to 21 inches in diameter; also 349.4 linear feet of trunk sewer, 4 feet in diameter, including 9 manholes constructed and 3 manholes reconstructed. This work was divided among 15 jobs, the average length being 151 linear feet and the average cost \$678.64.

There were also constructed by day labor 51 new catch-basins, 5 basins reconstructed, 5 manholes built, and 1,395 linear feet of basin constructions laid, varying in size from 10 to 18 inches in diameter, divided among 36 jobs, the average length of connection being 38.76 feet and the average cost \$133.85.

SUBURBAN SEWERS.

Under contract the Ivy City trunk sewer was constructed through squares Nos. 4064 and 4065, in West Virginia avenue between Oates street and Mount Olivet road, in Mount Olivet road from West Virginia to Capitol avenues, and in Capitol avenue from Mount Olivet road to Kendall street, and in Kendall street from Capitol avenue to Gallaudet street. There was also constructed in Second street NW. between Florida avenue and U street and in U street between Second and Flagler streets a storm water relief sewer. Also a portion of the Piney Branch Valley trunk sewer was constructed in Arkansas avenue between Delafield and Emerson streets, and a lateral line built in Delafield street between Arkansas and Georgia avenues. In Tunlaw road from Thirty-ninth street westward a lateral trunk line connecting with the Arizona avenue drainage system was built.

Trunk-line service sewers were constructed in Massachusetts avenue between Water-side drive and Observatory circle, in Fortieth street between Van Ness and Yuma streets, in Wisconsin avenue between Thirty-seventh and Garfield streets, in Fulton street between Wisconsin avenue and Thirty-ninth street, in Thirty-eighth street between Garfield and Fulton streets, and in Garfield street between Arkansas avenue and Thirty-eighth street. Service sewers were constructed in various streets of the Ivy City subdivision.

At the close of the year contract sewers were under construction in Arizona avenue north of Canal road, in Massachusetts avenue between Observatory circle and Wisconsin avenue, in Connecticut avenue between Klinge road and Newark street, and in Beach Drive between Piney Branch and Broad Branch.

By day labor there were constructed in addition to the above 3,445.8 linear feet of pipe sewers, varying in size from 8 to 24 inches in diameter and requiring 13 manholes. This work was divided among 16 jobs, the average length being 215.36 linear feet and the average cost being \$699.22.

FALLS BRANCH SEWER.

The second section of Falls Branch sewer was constructed by E. G. Gummel under contract No. 3885, and the final section was constructed by James A. Coyle under contract No. 3993, completing this trunk line.

ARIZONA AVENUE SEWER.

The outlet section to the Potomac River of the Arizona avenue trunk sewer, including the crossing under the Chesapeake and Ohio Canal, was completed by the Cranford Paving Company under contract No. 3932.

BROAD BRANCH AND SOAPSTONE BRANCH SEWER.

The upper section of the Broad Branch and Soapstone Branch sewer was constructed by the Warren F. Brenizer Company, under contract No. 4053, in the valley of Soapstone Branch between Thirtieth and Thirty-sixth streets, and in Albemarle street between Connecticut avenue and Grant road. The section in Soapstone Branch between Broad Branch and Thirtieth street, including a short section in Broad Branch, was constructed by E. G. Gummel under contract No. 4081. In addition to the above the lower section in Broad Branch road and connecting with the Rock Creek Valley drainage was under construction at the close of the fiscal year.

ASSESSMENT AND PERMIT WORK.

Under the permit system sewers were constructed by contract in the various streets of the Chevy Chase subdivision, aggregating in length 3,934.96 linear feet of 10-inch diameter pipe sewer, 2,043.9 linear feet of 12-inch diameter pipe sewer, including 14 manholes.

Also under the permit system by day labor there were constructed 4,098 linear feet of pipe sewer varying in size from 8 to 21 inches in diameter and including 15 manholes divided among 23 jobs, the average length being 178.04 feet and the average cost \$319.60. The average cost per linear foot for this sewer was \$1.794.

Under the assessment system by contract service sewers were constructed in Morris road between Spring street and Bryan place, in Georgia avenue from Shepherd road northward, and in Q street SE., between Twenty-third and Twenty-fifth streets.

In addition to the above the construction of service sewers in Emerson street between Arkansas and Iowa avenues was in progress at the close of the fiscal year.

Under the assessment system by day labor service sewers were constructed aggregating in length 33,141.5 linear feet and varying in size from 8 to 18 inches in diameter and including 45 manholes. This work was divided among 134 jobs, the average length being 247.32 linear feet and the average cost \$554.68. The average cost per linear foot was \$2.243.

There were also constructed by day labor 3 catch-basins, 9 basins reconstructed and 4 catch-basins adjusted, requiring the construction of 90 linear feet of pipe connection 10 and 12 inches in diameter. This work was divided among 11 jobs, the average length of connection per job being 8.18 linear feet and the average cost being \$71.67.

MISCELLANEOUS TRUST FUND DEPOSITS, DISTRICT OF COLUMBIA.

By contract sewers were constructed in Thirty-ninth street between Fulton and Garfield streets, in the alleys of block No. 1813, and in Garfield street between Thirty-eighth and Thirty-ninth streets and charged to the deposit of William F. Mattison. In addition to the above a sewer in Fulton street between Arizona avenue and Tunlaw road and in Tunlaw road between Fulton and Thirty-ninth streets was under construction at the end of the fiscal year, chargeable to the deposit of William F. Mattison.

By day labor 1,501 linear feet of pipe sewers and basin connections varying in size from 6 to 24 inches in diameter and including 1 manhole were constructed, also 11 catch-basins were reconstructed and 2 catch-basins abandoned, and 45 linear feet of 3-foot diameter trunk sewer reconstructed and 1 manhole adjusted.

The sewer in the grounds of the Bureau of the American Republics at Seventeenth and B streets NW. was finished upon request of and at the expense of the contractor of the same

MISCELLANEOUS ACCOUNTS.

Grading Massachusetts avenue, Wisconsin to Nebraska avenues.—In connection with the grading of Massachusetts avenue, a section of the Arizona avenue trunk sewer crossing Massachusetts avenue was under construction by contract at the close of the year.

Elimination of grade crossings, District of Columbia.—Under contract a section of sewer was constructed in South Capitol street between E and G streets. In addition to the above there was constructed by day labor pipe sewers and basin connections aggregating 3,255 linear feet, varying in size from 10 to 24 inches in diameter, requiring 9 manholes, 66 catch-basins, the reconstruction of 2 manholes and 6 catch-basins. One catch-basin was abandoned and 9 manholes and 7 catch-basins were adjusted.

There were constructed by day labor (in connection with the work of other departments and charged to the appropriations for their work) 985 linear feet of pipe sewers and basin connections varying in size from 10 to 15 inches in diameter, 1 manhole, 30 catch-basins, and 27 catch-basins were reconstructed and 7 manholes and 2 catch-basins were adjusted.

SEWAGE-DISPOSAL SYSTEM.

Sewerage pumping station.—The installation of steam plant and pumping machinery under contract No. 3011 with the Allis-Chalmers Company, the freight elevator under contract No. 3507, with the Albro-Clem Company, the coal-handling plant under contract No. 3602, with the John A. Mead Company, and the traveling crane under contract No. 3652, with the Pawling and Harnischfeger Company, were completed during the fiscal year.

Under contract No. 4083 with the American Mosaic Company the tiling of the engine-room floor was in progress at the close of the fiscal year.

By day labor the following work was performed: The 20,000,000-gallon pump on the separate system service was removed from the temporary station and erected on its permanent foundations in the pump room. The Worthington duplex pump removed from the temporary station was erected on the hydraulic pressure system and the Barr duplex pump on the boiler tube cleaning service. The oil filter and the waste-washing machine for the station service were both erected on the second floor of the screen chamber. Automatic recording tide and rain gauges were installed in the station. The installation of pressure and indicator systems for distance gate control was in progress, as was also the overhead system for removing ashes and wastes from the screens and sediment chambers. Work was in progress on the pavement of roadways during the year, and the improvement of parking adjacent to the station was practically completed.

A number of tests were made to determine the efficiency of the several electric generating units, and successful tests were made of the coal-handling electric cranes, and the hydraulic elevator installations. Preparations for the duty trials of the sewage and storm-water pumps installed under contract No. 3011 were in progress at the close of the fiscal year.

Throughout the year pumping service was maintained without interruption on the ordinary sewage, the special separate system, and on the storm-water system. The total quantity handled by the sewage pumps for the year was 25,016,147,000 gallons, or an average of 68,370,000 gallons per day; 6,530,000 pounds of coal were consumed, and there were used 1,269 gallons of cylinder oil, 1,122 gallons of engine oil, 3,761 pounds of cotton waste, 110 gallons of lard oil, 60 gallons of crank case oil, 750 gallons of coal oil, and 1,140 gallons of gasoline, the latter including the gasoline used by the towing launch engaged in the removal of wastes from the station. The station was placed in actual service under working conditions for the first time at the beginning of this fiscal year, and its operation was conducted without interruption, meeting all the requirements of the usual pumping service as well as handling without difficulty the rainfall on the low district during a number of storms of exceptional precipitation.

The B street and New Jersey avenue trunk sewer.—With the exception of two gate and regulator chambers under construction, this line was completed and placed in service during the year.

The outfall sewer and syphons.—The outfall sewer was completed under contract during the year, as was also the outfall, a double line of 60-inch diameter pipes to mid-channel of the Potomac River opposite Grimes.

By day labor the substructure of the outlet chamber, the sea wall, and the wharf at Grimes on the Potomac were completed.

At the close of the year all the sewage discharging into the Seventeenth Street Canal and the drainage of the James Creek Canal were diverted to the pumping station, as was a larger part of the sewage discharged into the Washington channel and the Eastern Branch of the Potomac. Work was in progress on the necessary construction for diverting the sewage discharged into the Potomac River at G street, through the Rock Creek Valley system, and at G street from the Easby Point and Ivy City system, as well as from the small lines discharging into the Washington channel.

The following tabulated statement of the electric conduits and gas mains laid during the fiscal year ending June 30, 1908, together with a summary of the electric conduits built prior to June 30, 1907, are submitted:

TABLES.

- Table No. 1 shows work performed under contracts.
- Table No. 2 shows work performed by day labor (permit system).
- Table No. 3 shows work performed by day labor (assessment system).
- Table No. 4 shows work performed by day labor (miscellaneous trust fund deposits).
- Table No. 5 shows work performed by day labor (main and pipe).
- Table No. 6 shows work performed by day labor (suburban).
- Table No. 7 shows work performed by day labor (elimination of grade crossings).
- Table No. 8 shows work performed by day labor (miscellaneous appropriations).
- Table No. 9 shows work performed by day labor (in connection with the sewage-disposal system).
- Table No. 10 shows the number of inspectors and the employees temporarily employed and the appropriation from which paid.
- Table No. 11 shows the average cost per linear foot of sewers and the average cost of catch-basins constructed by day labor.
- Table No. 12 shows the electric conduits laid during the fiscal year.
- Table No. 13 shows the gas mains laid during the fiscal year.
- Table No. 14 shows the summary of electric conduits laid to June 30, 1908.
- Table No. 15 shows the summary of gas mains laid to June 30, 1908.

RECAPITULATION.

| | |
|--|--------------------|
| Length of sewers constructed in the fiscal year 1908: | Miles. |
| Main sewers, 9,191.45 linear feet..... | 1. 74 |
| Pipe sewers, 95,023.1 linear feet..... | 18. 00 |
| Total length of sewers constructed in fiscal year..... | 19. 74 |
| Total length of sewers on June 30, 1908: | |
| Main sewers..... | 113. 943 |
| Pipe sewers..... | 407. 244 |
| Total..... | 521. 187 |
| Cost of sewer system to June 30, 1907..... | \$15, 519, 614. 40 |
| Cost of sewers (exclusive of maintenance), 1908..... | 452, 590. 16 |
| Total..... | \$15, 972, 204. 56 |

Very respectfully, your obedient servant,

ASA E. PHILLIPS,
Superintendent of Sewers.

Capt. WM. KELLY,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

60246—08—7

TABLE No. 1.—Statement of sewers constructed

| No. of contract. | Contractor. | Location. | Size of sewer. | Length of sewer. |
|------------------|---------------------|---|---------------------------|------------------|
| | | | | <i>Feet.</i> |
| 3885 | E. G. Gummel | Valley of Falls Branch | 24 inches | 4,644.3 |
| 3896 | do | Squares Nos. 4064 and 4065 and West Virginia avenue, between Oates street and Mount Olivet road. | 7 feet 6 inches diameter. | 751.62 |
| | | | 7 feet diameter | 1,886.88 |
| | | | 15 inches | 12 |
| 3913 | do | Mount Olivet road, between West Virginia avenue and Capitol avenue; Capitol avenue, between Mount Olivet road and Kendall street; Kendall street, between Capitol avenue and Gallaudet street. | 7 feet diameter | 345.9 |
| | | | 6 feet diameter | 743.1 |
| | | | 3 feet 9 inches diameter | 1,061.3 |
| 3929 | W. F. Brenizer Co. | Second street nw., between Florida avenue and U street; U street, between Second and Flagler streets. | 3 feet 3 inches diameter. | 684.7 |
| | | | 12 inches | 6 |
| | | | 6 inches under-drain. | 531 |
| 3932 | Cranford Paving Co. | Valley of Foundry Branch from Potomac River to Washington Aqueduct property. | 9 feet diameter | 304.95 |
| 3932 | do | Valley of Foundry Branch from Conduit road to mouth of Foundry Branch sewer. | do | 430 |
| 3933 | Jas. A. Coyle | Valley of Falls Branch, between Massachusetts avenue and River road. | 24 inches | 24 |
| | | | 18 inches | 5,544.6 |
| 3930 | E. G. Gummel | Seventh street ne., between Massachusetts avenue and East Capitol street. | do | 419.6 |
| | | | 15 inches | 69.6 |
| | | | 12 inches | 214 |
| 3930 | do | Twentieth street nw., between M street and New Hampshire avenue. | 24 inches | 264 |
| | | | 21 inches | 319.3 |
| | | | 18 inches | 250.7 |
| 4090 | do | West side James Creek, between N and P streets, and P street, between Canal and Four-and-a-half streets. | 24 inches | 709 |
| | | | 18 inches | 378 |
| 3975 | W. F. Brenizer Co. | South Capitol street, between E and G streets. | 2 feet 6 inches diameter. | 302.4 |
| | | | 24 inches | 303 |
| 4064 | E. G. Gummel | Arkansas avenue, between Delafield and Emerson streets, and Delafield street, between Arkansas and Brightwood avenues. | 9 feet 3 inches diameter. | 415.1 |
| | | | 4 feet 6 inches diameter. | 767 |
| 4074 | do | Massachusetts avenue, between Waterside drive and Observatory circle. | 15 inches | 2,651 |
| | | | 12 inches | 131 |
| | | | 10 inches | 280 |
| 4079 | W. F. Brenizer Co. | Fortieth street, between Van Ness and Yuma streets, and Wisconsin avenue, between Van Ness street and River road. | 21 inches | 1,168.4 |
| | | | 15 inches | 881.5 |
| | | | 12 inches | 1,223.9 |
| 4084 | do | Ivy City subdivision, streets of | 24 inches | 733.62 |
| | | | 18 inches | 899.04 |
| | | | 15 inches | 585.95 |
| | | | 12 inches | 3,398.44 |
| 4091 | Jas. A. Coyle | Thirty-ninth street nw., between Fulton and Garfield streets, alleys, block 1813, Garfield street, between Thirty-eighth and Thirty-ninth streets. | do | 1,069.5 |
| 4091 | do | Tunlaw road, from Thirty-ninth street, 650 feet westward; Thirty-ninth street, between Tunlaw road and Fulton street. | 15 inches | 1,025.1 |
| | | Wisconsin avenue, between Thirty-seventh street, and a point 100 feet north of Garfield street; Fulton street, between Wisconsin avenue and Thirty-ninth street; Thirty-eighth street, between Fulton and Garfield streets; Garfield street, between Wisconsin avenue and Thirty-eighth street. | 18 inches | 1,230.4 |
| | | | 15 inches | 1,179.2 |
| | | | 12 inches | 630.9 |
| 4093 | W. F. Brenizer Co. | Fulton street, between Arizona avenue and Tunlaw road; Tunlaw road between Fulton street and Thirty-ninth street. | | |
| 3930 | E. G. Gummel | Morris road, between Spring street and Bryant place. | 24 inches | 167 |
| | | | 21 inches | 203 |
| | | | 18 inches | 200 |
| | | | 15 inches | 318 |

a Includes work previously reported.

b Work incomplete, payment on account.

under contract in the fiscal year ending June 30, 1908.

| Allowance to contractor. | Materials. | | Cost of inspection. | Cost of repairs to pavements. | Total cost. | Appropriation. |
|--------------------------------|------------|---------------------|------------------------|-------------------------------------|--------------------------|---------------------------------------|
| | Charged. | Not charged. | | | | |
| \$17,046.10 | \$2,120.20 | \$4,645.38 | \$856.00 | ..... | ^a \$24,667.68 | Falls Branch sewer. |
| 27,953.41 | 10,519.92 | 34.21 | 1,048.50 | ..... | ^a 39,556.04 | Suburban sewers, 1907. |
| 9,477.84 | 3,541.50 | 17.44 | 364.00 | ..... | ^a 13,400.78 | Do. |
| 11,214.35 | 2,566.80 | 53.29 | 474.75 | \$648.84 | 14,958.03 | Do. |
| 15,311.18 | 1,902.41 | 2.14 | 672.00 | ..... | 17,887.73 | Arizona avenue sewer. |
| 6,790.30 | 2,225.04 | 29.28 | 320.00 | ..... | 9,364.62 | Do. |
| 11,940.30 | 1,341.41 | 2,886.83 | 896.00 | ..... | 17,064.54 | Falls Branch sewer. |
| 1,819.37 | 192.50 | 324.55 | 117.50 | 151.75 | 2,605.67 | Main and pipe sewers, 1908. |
| 2,081.30 | 283.72 | 648.67 | 102.00 | 247.19 | 3,362.88 | Do. |
| 2,513.39 | 393.75 | ..... | 116.00 | ..... | (^b) | Do. |
| 4,037.58 | 437.33 | 490.08 | 96.75 | ..... | ^c 5,051.74 | Do. |
| 8,426.49 | 3,942.45 | 13.81 | 452.00 | ..... | 12,834.75 | Suburban sewers, 1908. |
| 4,021.23 | 637.36 | 1,218.15 | 214.00 | 6.48 | 6,117.22 | Do. |
| 5,455.75 | 741.20 | 1,688.43 | 166.50 | 525.42 | 8,577.30 | Do. |
| 7,992.14 | 1,188.06 | 2,583.94 | 256.50 | ..... | 12,020.64 | Do. |
| 1,403.82 | 170.08 | ^d 436.09 | 66.00 | ..... | 2,075.99 | Deposit of Wm. F. Mattison. |
| 1,813.79 | 134.07 | 338.86 | 36.00 | ..... | 2,322.72 | Suburban sewers, 1908. |
| 5,551.54 | 133.75 | 1,082.86 | 158.00 | ..... | 6,926.15 | Do. |
| 1,167.25 | 402.75 | (^b) | 108.00 | ..... | ..... | Deposit of Wm. F. Matteson. |
| 2,230.89 | 277.50 | 568.69 | 91.50 | 21.59 | 3,190.17 | {Assessment and permit work, 1908. |

^cIncludes \$137.02, cost of work by water department.

^dIncludes \$98.86 for contingencies.

TABLE NO. 1.—Statement of sewers constructed

| No. of contract. | Contractor. | Location. | Size of sewer. | Length of sewer. |
|------------------|------------------------------|---|--|--------------------------|
| 3930 | E. G. Gummel..... | Brightwood avenue from Shepherd road northward. | 12 inches..... | <i>Feet.</i> 781 |
| 3931 | Lyons Bros..... | Q street se., between Twenty-third and Twenty-fifth streets. | 12 inches..... | 640.3 |
| 4103 | E. G. Gummel..... | Emerson street, between Arkansas and Iowa avenues. ^a | ..... | ..... |
| 4053 | W. F. Brenizer Co..... | Valley of Soapstone Branch, between Thirtieth and Thirty-sixth streets; Albermarle street, between Connecticut avenue and Grant road. | 24 inches..... 18 inches..... 15 inches..... | 24 1,976.2 3,888.2 |
| 4081 | E. G. Gummel..... | Valley of Broad Branch, between Rock Creek and Soapstone Branch; Valley of Soapstone Branch, between Broad Branch and Thirtieth street. | 21 inches..... 18 inches..... | 560 2,700 |
| 4112 | W. F. Brenizer Co..... | Arizona avenue at its intersection with Massachusetts avenue. ^a | ..... | ..... |
| 4086 | E. G. Gummel..... | Sixth street west, between Maine and Missouri avenues. | 4 feet diameter.... | 792 |
| 3975 | W. F. Brenizer Co..... | South Capitol street, between G street and Virginia avenue. | 2 feet 6 inches diameter. | 351.1 |
| 3975 |do..... | South Capitol street, Canal street, to James Creek Canal (removing arch, old Tiber sewer). ^c | ..... | ..... |
| 4123 | R. J. Beall Construction Co. | Arizona avenue, north of Canal road ^d | 9 feet diameter.... | ..... |
| 4120 | Jas. A. Coyle..... | Massachusetts avenue, Observatory Circle to Wisconsin avenue. ^d | ..... | ..... |
| 4126 | W. F. Brenizer Co..... | Connecticut avenue, between Klingie road and Newark street. ^d | ..... | ..... |
| 4126 |do..... | Right of way east of Ross place ^d..... | ..... | ..... |
| 4128 |do..... | Beach Drive, between Piney Branch and Pierce Mill road. ^d | ..... | ..... |
| 4130 |do..... | Blagden avenue, between Beach drive and Decatur street. ^d | ..... | ..... |
| 4132 | E. J. Cartright..... | Broad Branch road, southward along Beach Drive. ^d | ..... | ..... |
| 4133 | E. G. Gummel..... | Second street ne., between F and G streets. ^d | ..... | ..... |
| 4137 | R. J. Beall Construction Co. | Twenty-fourth street nw., between M and N streets. ^d | ..... | ..... |
| 4130 | W. F. Brenizer Co..... | Blagden avenue and Sixteenth street extended—Decatur and Hamilton streets. ^d | ..... | ..... |
| | | | | 51,076.80 |

^a Work incomplete.^b Works incomplete; payment on account.

under contract in the fiscal year ending June 30, 1908—Continued.

| Allowance to contractor. | Materials. | | Cost of inspection. | Cost of repairs to pavements. | Total cost. | Appropriation. |
|--------------------------------|------------|-----------------|------------------------|-------------------------------------|-------------|---|
| | Charged. | Not charged. | | | | |
| \$1,426.60 | \$168.00 | \$253.98 | \$104.00 | \$153.93 | \$2,106.51 | { Assessment and permit work, 1908. |
| 1,131.82 | 125.00 | 205.21 | 65.00 | ..... | 1,527.03 | Do. |
| ..... | ..... | ..... | 76.00 | ..... | ..... | Do. |
| { 10,257.40 | 1,314.96 | 2,670.11 | 405.00 | 1.77 | 14,649.24 | { Broad Branch and Soapstone Valley sewer. |
| { 5,432.80 | 918.00 | (b) | 316.00 | ..... | ..... | Do. |
| ..... | ..... | ..... | 16.00 | ..... | ..... | Grading Massachusetts ave- nue, between Wisconsin and Nebraska avenues. |
| 4,298.72 | 1,503.24 | 31.78 | 156.00 | ..... | 5,989.74 | Main and pipe sewers, 1908. |
| 2,404.30 | 584.37 | 32.09 | 67.25 | ..... | 3,088.01 | Elimination of grade cross- ings. |
| ..... | ..... | ..... | ..... | ..... | ..... | Do. |
| None. | ..... | ..... | ..... | ..... | ..... | Suburban sewers, 1908. |
| None. | ..... | ..... | ..... | ..... | ..... | Do. |
| None. | ..... | ..... | ..... | ..... | ..... | Do. |
| None. | ..... | ..... | ..... | ..... | ..... | Do. |
| None. | ..... | ..... | ..... | ..... | ..... | Do. |
| None. | ..... | ..... | ..... | ..... | ..... | Broad Branch and Soapstone Valley sewer. |
| None. | ..... | ..... | ..... | ..... | ..... | Main and pipe. |
| None. | ..... | ..... | ..... | ..... | ..... | Assessment and permit work. |
| None. | ..... | ..... | ..... | ..... | ..... | Do. |
| 173,199.66 | 37,785.37 | 20,245.87 | 7,817.25 | 1,756.97 | 229,355.18 | |

c Cost shown on table which follows.

d Work completed fiscal year 1909.

Sewage-disposal system, District of Columbia. Statement

| No. of contract. | Contractor. | Section. | Character of work. |
|------------------|-----------------------------|---|---|
| 3011 | Allis Chalmers Co..... | Sewerage pumping station..... | Pumping plant..... |
| 3507 | Albro Clem Elevator Co..... |do..... | Freight elevator..... |
| 3553 | Malcolm W. Hill & Co..... |do..... | Electric generating plant..... |
| 3602 | John A. Mead Co..... |do..... | Coal-handling machinery..... |
| 3652 | Pawling & Harmschfeger..... |do..... | 15-ton electric crane..... |
| 3696 | J. H. Loucheim..... | Outfall at Grimes, Potomac River. | 60-inch diameter cast-iron pipe.. |
| 3716 | The Warren F. Brenizer Co. | Outfall sewer, final section..... | 8-foot 4-inch by 9-foot 4-inch sewer |
| 3903 |do..... | B street and New Jersey avenue trunk sewer. | Trunk line, crossing old Tiber sewer. |
| 3941 |do..... |do..... | Trunk line, crossing Seventeenth street sewer. |
| 3942 |do..... |do..... | Trunk line, crossing Tenth street sewer. |
| 3975 |do..... |do..... | Removing old Tiber sewer in South Capitol street. |
| 4026 |do..... | Park drainage..... | Trunk line to tidal reservoir..... |
| 4083 | American Mosaic Co..... | Sewerage pumping station..... | Tiling engine room floor..... |
| 3925 | E. J. Cartright..... | East side interceptor..... | 4 feet 6 inches diameter, Nineteenth and C streets to Thirtieth and M streets ne. |
| 4092 | The Warren F. Brenizer Co. |do..... | 4 feet 3 inches diameter, Hickeys Run to Bladensburg road. |

^a Includes work previously reported.

^b Includes \$199.74 for electric wiring hoist; also \$109.99 for electric wiring crusher; also \$596 penalty.

^c Includes \$576 charged to contractor.

^d Includes \$198 charged to contractor.

of work under contract, fiscal year ending June 30, 1908.

| Com- pleted. | Payments on con- tracts. | Materials of con- struction. | | Cost of inspec- tion. | Cost of repairs to pave- ments. | Appropriation. |
|-----------------|--------------------------------|--|---|-----------------------------|--|---|
| | | Charge- able to con- tractor. | Not charge- able to con- tractor. | | | |
| No.... | ^a \$251,929.50 | \$172.50 | ..... | \$572.00 | ..... | Sewerage pumping station. |
| Yes.... | ^a 1,689.00 | ..... | ..... | ..... | ..... | Do. |
| Yes.... | ^a 8,000.00 | ..... | ..... | 232.50 | ..... | Unused balances. |
| Yes.... | ^a 17,566.27 | ^b 905.73 | ..... | ^c 297.50 | ..... | Unused balances, sewage-disposal system. |
| Yes.... | ^a 7,000.00 | ..... | ..... | ..... | ..... | Unused balances. |
| Yes.... | ^a 35,031.82 | ..... | ..... | ^d 5,090.25 | ..... | Outfall sewer and siphon. |
| Yes.... | ^a 224,353.73 | 65,051.47 | \$1,367.68 | ^e 2,985.50 | ..... | Do. |
| Yes.... | ^a 18,296.43 | 3,682.25 | 49.79 | 444.00 | ..... | B street and New Jersey avenue trunk sewer, section F. |
| Yes.... | 3,182.56 | ^f 575.58 | 15.04 | 157.50 | \$251.66 | Do. |
| Yes.... | 9,936.77 | 1,817.22 | 33.53 | 216.00 | 180.93 | Do. |
| Yes.... | ^g 788.92 | ..... | ..... | 135.50 | ..... | Do. |
| Yes.... | 16,424.99 | 3,726.00 | 95.68 | ^h 315.00 | 63.50 | Outlet to old B street sewer. |
| Yes.... | 1,001.11 | ..... | ..... | ..... | ..... | Unused balances. |
| No.... | 39,051.21 | 12,514.50 | ..... | 1,501.50 | ..... | East side intercepting, boundary to Brookland. |
| No.... | ..... | ..... | ..... | ..... | ..... | Do. |

^e Includes \$128 charged to contractor.

^f Includes \$10 cost of removing arc lamp.

^g Half cost paid by appropriation "Elimination of grade crossings."

^h Includes \$159 charged to contractor.

TABLE NO. 2.—Statement of sewers laid under the appropriation for

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | Man-holes. | Branches. |
|---------------|--|------------------------------------|----------|---------|--------|------------|-----------|
| | | 8 in. | 10 in. | 12 in. | 21 in. | | |
| 2a | Brightwood avenue nw., between Allison and Buchanan streets. | | | 342 | | 1 | |
| | Chevy Chase..... | | 3,934.96 | 2,043.9 | | 14 | |
| 8 | Connecticut avenue nw., between Morrison and McKinley streets. | | | 306 | | 1 | |
| 10 | Connecticut avenue nw., between McKinley and Northampton streets. | | | 360 | | 1 | |
| 11 | Connecticut avenue nw., between Northampton and Oliver streets. | | 280 | | | 1 | 5 |
| 12 | Connecticut avenue nw., between Oliver street and Chevy Chase Circle. | 85 | 201 | | | 1 | 5 |
| 20 | Connecticut avenue nw., between Florida avenue and S street. | | 47 | | | | 1 |
| 7 | Fourteenth street nw., between Spring road and Quincy street. | | | 89 | | | 4 |
| 9 | Fifth street nw., from Rittenhouse street northward. | | 32 | | | | 1 |
| 15 | Parcel No. 55-3, between Klinge road and Macomb street. | | 288 | | | 1 | |
| 22 | Square 4076, just north of Turner and west of Sixteenth streets ne. | | | 186 | | 1 | |
| 2 | G street se., between Thirteenth and Fourteenth streets, south side. | | 5 | | | | 1 |
| 3 | G street nw., between Eleventh and Twelfth streets, south side. | | | 193 | | 1 | 2 |
| 4 | Monroe street nw., between Eighteenth and Nineteenth streets. | | | 11 | | | 1 |
| 13 | McKinley street nw., Connecticut avenue eastward. | | 263 | | | | 7 |
| 6 | Nineteenth and Lamont streets to Twentieth street and Adams Mill road. | | | | 306 | | |
| 14 | Northampton street nw., Connecticut avenue eastward. | | 274 | | | | 8 |
| 21 | Square 965..... | | 131 | | | 2 | 1 |
| 5 | Park road nw., between Eleventh street and Sherman avenue. | | 17 | | | | 1 |
| 17 | Square 653..... | | 212 | | | 2 | 1 |
| 16 | Square 3036..... | | 197 | | | 2 | 4 |
| 18 | Square 144 (15-foot alley)..... | | | 146 | | 1 | 1 |
| 19 | Block 2531..... | 33 | | | | | |
| 23 | Square 252..... | 34 | | | | | 2 |
| Total..... | | 152 | 5,881.96 | 3,736.9 | 306 | 29 | 45 |

a Work performed under contract No. 3970 by Jas. A. Coyle.

b Balance carried forward to job No. 10.

c Balance brought forward from job No. 8.

d Balance carried forward to job No. 11.

e Balance brought forward from job No. 10.

assessment and permit work (permit system), fiscal year ending June 30, 1908.

| Amount of deposit. | Cost to District of Columbia. | Cost to depositor. | Total cost. | Amount returned. | For whom done. | Foreman. | Date of completion. |
|--------------------|-------------------------------|--------------------|-------------|------------------|------------------------------------|------------|---------------------|
| \$320.00 | ----- | ----- | \$641.52 | ----- | Fourteenth Street Heights Land Co. | Ward. | |
| 7,000.00 | \$6,789.73 | \$6,789.74 | 13,579.47 | \$210.26 | E. J. Stellwagen ^a | ----- | Dec. 2, 1907 |
| 1,500.00 | 314.15 | 314.16 | 628.31 | (b) | Thos. J. Fisher & Co. | Ward. | Jan. 18, 1908 |
| (c) | 275.27 | 275.27 | 550.54 | (d) | do. | do. | Jan. 20, 1908 |
| (e) | 180.71 | 180.71 | 361.42 | (f) | do. | do. | Jan. 23, 1908 |
| (g) | 186.73 | 186.72 | 373.45 | (h) | do. | do. | Jan. 27, 1908 |
| 45.00 | ----- | ----- | 91.05 | ----- | Fredk. B. Pyle | do. | Apr. 20, 1908 |
| 90.00 | 68.93 | 68.94 | 137.87 | 21.06 | Harry Wardman | Palmer | Dec. 31, 1907 |
| 65.00 | 27.71 | 27.72 | 55.43 | 37.28 | John H. Fisher | Ward | Jan. 9, 1908 |
| 275.00 | 251.79 | 251.79 | 503.58 | 23.21 | John L. Warren | Thomas | Jan. 23, 1908 |
| 150.00 | 145.43 | 145.44 | 290.87 | 4.56 | A. H. Semmes | do. | Apr. 25, 1908 |
| 10.00 | 6.18 | 6.19 | 12.37 | 3.81 | Harry Wardman | Lanigan | Aug. 8, 1907 |
| 286.88 | 286.88 | 286.88 | 573.76 | ----- | J. B. Henderson | Thomas | Dec. 6, 1907 |
| 11.50 | 9.96 | 9.97 | 19.93 | 1.53 | Allard & Appleby | Ward | Sept. 4, 1907 |
| (i) | 168.75 | 168.76 | 337.51 | (j) | Thos. J. Fisher & Co. | do. | Jan. 17, 1908 |
| 560.00 | 462.84 | 462.85 | 925.69 | 97.15 | S. C. Briggs | J. Lanigan | Dec. 9, 1907 |
| (k) | 174.42 | 174.42 | 348.84 | 199.96 | Thos. J. Fisher & Co. | Ward | Jan. 20, 1908 |
| 213.00 | 167.04 | 167.05 | 334.09 | 45.95 | Jas. L. Parsons | Thomas | Apr. 27, 1908 |
| 17.00 | 11.85 | 11.85 | 23.70 | 5.15 | F. A. Blundon | Palmer | Oct. 8, 1907 |
| 185.00 | 166.56 | 166.56 | 333.12 | 18.44 | J. M. Coleman | T. Lanigan | Feb. 25, 1908 |
| 200.00 | 193.77 | 193.77 | 387.54 | 6.23 | N. T. Haller | Ward | Mar. 17, 1908 |
| 125.00 | ----- | ----- | 252.79 | ----- | J. H. Crossman | do. | June 8, 1908 |
| 50.00 | 49.82 | 49.82 | 99.64 | 0.18 | S. H. Edmonston | do. | Do. |
| 33.00 | ----- | ----- | 67.66 | ----- | Chas. H. Craigen | do. | May 8, 1908 |
| 11,136.38 | 9,938.52 | 9,938.61 | 20,930.15 | 674.77 | | | |

^f Balance carried forward to job No. 12.^g Balance brought forward from job No. 11.^a Balance carried forward to job No. 13.ⁱ Balance brought forward from job No. 12.^j Balance carried forward to job No. 14.^k Balance brought forward from job No. 13.

TABLE No. 3.—Statement of sewers laid under the appropriation for assessment

| No. of order. | Location. | Pipe sewer laid (length in feet). | | | | |
|---------------------|---|-----------------------------------|--------------|--------------|--------------|--------------|
| | | 8- inch. | 10- inch. | 12- inch. | 15- inch. | 18- inch. |
| 131 | Adams street nw., between First and North Capitol streets ^a | | | | | |
| 133 | Square 1056 and in Ames place | | | 426.3 | 95.7 | |
| 156 | Adams street nw., between First and North Capitol streets, north side | | | 275.76 | | |
| 164 | Ames street ne., between Fourteenth and Fifteenth streets | | | 196 | | |
| 220 | A street se., between Eighteenth and Nineteenth streets | | | 140.5 | | |
| 224 | Adams street nw., between First and Second streets | | | 170 | 5 | |
| 109 | Brightwood avenue, between Piney Branch and Sheridan street | | | 30 | | |
| 163 | Brightwood avenue, between Shepard and Taylor streets | | | 293.59 | | |
| 214 | Bryant street nw., Fourth street eastward | | | 358 | | |
| 102 | Canal street sw., between N and O streets | | | 80 | | |
| 114 | Columbia road, between Kalorama road and Eighteenth street | | | | 50 | 202 |
| 140 | Connecticut avenue, between Kalorama and Wyoming avenues, west side | | | 262.1 | | |
| 144 | Chestnut street, between Valley and Maple streets, Anacostia | | 366 | | | |
| 155 | Carroll street se., between South Railroad avenue and Prout street | | 561.3 | | 31.1 | |
| 181 | C street nw., between Twenty-first and Twenty-second streets, north side | | | 298.5 | | |
| 182 | C street nw., between Twenty-first and Twenty-second streets, south side | | | 334.4 | 200 | |
| 233 | Columbia road, from Brightwood avenue eastward | | | | 67 | |
| 241 | Connecticut avenue, between Twenty-fourth and Calvert streets | | | | 100 | |
| 169 | D street sw., between Eleventh and Twelfth streets | | | | | 323.6 |
| 127 | East Capitol street ne., between Thirteenth and Fourteenth streets | | | 130 | | |
| 146 | Square 1190 | | | 79.5 | | |
| 151 | Elm street nw., between Fourth and Fifth streets | | | 29.5 | | |
| 158 | E street se., between Third and Fourth streets, south side | | | 227 | | |
| 171 | Elm street nw., between Fourth and Fifth streets | | | 44 | | |
| 175 | E street sw., between Eleventh and Twelfth streets, north side | | | 208 | | |
| 190 | Square 801 | | 80 | | | |
| 225 | East Capitol street, between Thirteenth and Fourteenth streets ne. | | | 108 | | |
| 237 | Eleventh street nw., between Euclid and Fairmont streets | | | 176 | | |
| 249 | Eighteenth street ne., between E and Rosedale streets | | | 207 | | |
| 250 | E street ne., between Eighteenth and Nineteenth streets ^b | | | | | 334 |
| 112 | F street nw., between Twenty-first and Twenty-second streets, south side | | 105.5 | | 374 | |
| 113 | Fourteenth street ne., between F and G streets, east side | | 99 | | | |
| 118 | Northeast corner Fifteenth and Q streets nw. ^a | | | | | |
| 119 | Northeast corner Fifteenth and K streets nw. ^a | | | | | |
| 173 | Fifteenth street ne., between Benning road and Gales street | | | 120.3 | | |
| 186 | Square 4045 | | 311.5 | | | |
| 187 | Square 4054 | | 431 | | | |
| 204 | Square 5 | | | 185 | | |
| 213 | Fourteenth street nw., between Newton and Monroe streets, east side | | | 345 | | |
| 221 | Northwest corner Fourth and M streets nw. | | | 28.5 | | |
| 222 | Fifteenth street nw., between V and W streets | | | | | |
| 243 | Fifteenth street ne., between Gales street and Benning road | | 6 | | 240.4 | |
| 244 | Square 545 | | 56 | | 6 | |
| 246 | Fifteenth and W streets nw., northwest corner | | | | 12 | |
| 247 | Fifteenth street nw., just north of W street, east side | | | | | |
| 105 | G street sw., between Half and South Capitol streets | | 100 | | | |
| 152 | Garfield street nw., between Connecticut avenue and Twenty-seventh street | | | | | |
| 198 | Girard street ne., between Twelfth and Thirteenth streets | | | | | 524 |
| 216 | Gales street ne., between Eighteenth and Nineteenth streets | | | | 663 | |
| | | | | | 265 | |

^a Work begun in fiscal year 1907.^b Work completed in fiscal year 1909.

and permit work (assessment system), fiscal year ending June 30, 1908.

| Manholes. | Basins. | | | Branches. | Cost of materials. | Cost of labor and contingencies. | Cost of repairs to pavements. | Cost of work by plumber. | Total cost. |
|-----------|---------|-----------|------------|-----------|--------------------|----------------------------------|-------------------------------|--------------------------|---------------------|
| | Built. | Re-built. | Ad-justed. | | | | | | |
| 3 | | | | 11 | \$339.33 | \$49.53 716.16 | | | \$49.53 1,055.49 |
| | | | | | 166.83 | 329.13 | | | 495.96 |
| 1 | | | | 9 | 131.51 | 373.86 | | | 505.37 |
| 1 | | | | | 92.14 | 184.99 | | | 277.13 |
| 2 | | | | 4 | 144.22 | 271.42 | \$10.32 | | 425.96 |
| | | | | 1 | 15.75 | 38.98 | | | 54.73 |
| 2 | | | | 1 | 195.18 | 521.58 | 25.81 | | 742.57 |
| 2 | | | | 4 | 232.40 | 485.28 | | | 717.68 |
| 1 | | | | 2 | 52.38 | 77.86 | | | 130.24 |
| 1 | | | | 1 | 207.84 | 521.32 | 64.32 | | 793.48 |
| 1 | | | | | 156.21 | 325.51 | | | 481.72 |
| 1 | | | | 3 | 170.00 | 672.53 | | | 842.53 |
| 3 | | | | 17 | 304.31 | 1,520.55 | | | 1,824.86 |
| 2 | | | | | 207.06 | 352.45 | | | 559.51 |
| 2 | | | | 5 | 349.38 | 663.38 | | | 1,012.76 |
| 1 | | | | 3 | 74.31 | 101.91 | | | 176.22 |
| | | | | 2 | 62.96 | 273.94 | | | 336.90 |
| 2 | | | | 2 | 310.86 | 564.33 | 15.33 | | 890.52 |
| | | | | 4 | 61.43 | 190.39 | | | 251.82 |
| | | | | 1 | 40.80 | 80.73 | | | 121.53 |
| | | | | 2 | 16.06 | 34.59 | | | 50.65 |
| 1 | | | | 1 | 137.54 | 228.79 | 24.99 | | 391.32 |
| | | | | | 22.79 | 72.83 | | | 95.62 |
| 2 | | | | 2 | 152.35 | 235.44 | 29.56 | | 417.35 |
| 1 | | | | 3 | 53.61 | 89.70 | 64.07 | | 207.38 |
| 1 | | | | 2 | 80.03 | 205.60 | | | 285.63 |
| 1 | | | | 6 | 107.04 | 411.72 | 25.66 | | 544.42 |
| | | | | | 102.73 | 170.62 | | | 273.35 |
| 1 | | | | | 292.67 | 334.97 | | | 627.64 |
| 2 | | | | 16 | 297.88 | 919.85 | 81.87 | | 1,299.60 |
| 1 | | | | 5 | 54.01 | 142.77 | 11.97 | | 208.75 |
| | | | | | 6.74 | 12.03 | | | 18.77 |
| | | | | | 13.95 | 19.68 | | | 33.63 |
| 1 | | | | 4 | 94.97 | 234.37 | 20.42 | | 349.76 |
| 1 | | | | 7 | 163.38 | 405.28 | | | 568.66 |
| 1 | | | | 16 | 204.43 | 364.29 | | | 568.72 |
| 2 | | | | 1 | 139.55 | 240.33 | 94.97 | | 474.85 |
| 2 | | | | 13 | 236.34 | 500.97 | | | 737.31 |
| | | | | | | 4.55 | | | 4.55 |
| | | | | 2 | 14.00 | 54.19 | 9.47 | | 77.66 |
| 1 | | | | 1 | 144.73 | 282.44 | | | 430.17 |
| 1 | | | | | 45.38 | 213.62 | 73.57 | | 322.57 |
| | | | | | 13.31 | 43.18 | | | 56.49 |
| | | | | | 19.57 | 42.10 | | | 61.67 |
| | | | | 4 | 38.82 | 75.33 | | | 114.15 |
| 1 | | | | 12 | 438.98 | 680.08 | | | 1,119.06 |
| 2 | | | | 7 | 469.40 | 1,484.82 | 12.53 | | 1,966.75 |
| 1 | | | | 6 | 193.45 | 285.13 | | | 478.58 |

TABLE NO. 3.—Statement of sewers laid under the appropriation for assessment

| No. of order. | Location. | Pipe sewer laid (length in feet). | | | | |
|---------------------|--|-----------------------------------|--------------|--------------|--------------|--------------|
| | | 8- inch. | 10- inch. | 12- inch. | 15- inch. | 18- inch. |
| 229 | Gales street ne., between Nineteenth and Twentieth streets. | | | 101.5 | | |
| 125 | H street ne., between Twelfth and Thirteenth streets, south side. | | | 72 | | |
| 172 | H street nw., between First and Fourth streets. | | | 6 | | |
| 159 | Ingraham street nw., between Illinois avenue and Eighth street. | 77 | 183 | | | |
| 188 | Idaho avenue nw., between Ordway and Porter streets, west side. | | 312.6 | | | |
| 235 | I street ne., between Fourth and Fifth streets, north side. | | | 119.6 | | |
| 236 | Irving street nw., from Brightwood avenue eastward. | | | | 66 | |
| 115 | Jefferson street, between Monroe and Filmore streets, Anacostia. | | 243.9 | | | |
| 145 | Jefferson street nw., between Chesapeake and Ohio Canal and M street. | | | 213.6 | | |
| 166 | K street se., between New Jersey avenue and First street. | | | 156 | | |
| 168 | Keating avenue, between Lincoln avenue and Second street ne. | | | 265.5 | 300 | |
| 203 | K street nw., between Twenty-seventh and Twenty-eighth streets, north side. | | | 138 | | |
| 179 | L street ne., between Fifth and Sixth streets, south side. | | | 128 | | |
| 124 | Monroe street nw., between Holmead and Fourteenth streets. | | | 412 | | |
| 130 | Maryland avenue ne., between Second and Fourth streets. | | 15 | | | |
| 147 | Morris road se., between Spring street and Bryant place. | | | 400 | | |
| 157 | Madison street nw., between Brightwood avenue and Ninth street. | | 530 | | | |
| 165 | Monroe street nw., between Eleventh and Thirteenth streets. | | | 184 | | |
| 193 | Mount Olivet road and Montello avenue, between West Virginia avenue and Raum street. | | | 274.2 | | 267.85 |
| 206 | Massachusetts avenue nw., between Sixteenth and Seventeenth streets, south side. | | | | | 135 |
| 212 | Monroe street nw., between Eleventh and Thirteenth streets. | | | 350 | | |
| 180 | Macomb street nw., between Connecticut avenue and a point 530' east. | | 390 | | | |
| 135 | North Capitol street, between Bryant and Channing streets, west side. | | | 311.7 | | 45 |
| 136 | Naylor street se., between Twenty-third and Twenty-fifth streets. | | 518.5 | | | |
| 138 | Newton street nw., between Fourteenth street and Holmead place. | | 90 | | | |
| 141 | N street ne., between First and Second streets. | | | | 318.4 | |
| 142 | Naylor road se., between Twenty-second and Twenty-third streets. | | 296 | 343.7 | | |
| 143 | Yard on New Jersey avenue se., between M and N streets a. | | | | | |
| 154 | Ninth street nw., between Longfellow and Madison streets. | | 989 | | | |
| 174 | North Capitol street between Bryant and Channing streets, east side. | | | 314 | | 67 |
| 194 | Norton place nw., between Wisconsin avenue and Thirty-sixth street. | | 374.5 | | | |
| 226 | Ninth and Q streets nw., southwest corner. | | | 6 | | |
| 106 | Square 196. | | 87 | 193.5 | | |
| 149 | Ontario road nw., between Florida avenue and Kalorama road. | | | 301 | | |
| 160 | Ontario road nw., between Florida avenue and Kalorama road. | | | | 373 | |
| 189 | O street sw., between One-half and South Capitol streets. | | | 334 | | |
| 196 | Ordway street nw., between Wisconsin avenue and Thirty-sixth street. | | 443 | | | |
| 251 | Oak street nw., between Fourteenth street and Holmead place b. | | | 118 | | |
| 217 | Ohio avenue nw., between Twelfth and Thirteenth streets. | | | 54 | | |
| 117 | Pennsylvania avenue nw., between C and Tenth streets. | | | 154.7 | 73 | 36 |
| 126 | Pennsylvania avenue nw., between Sixth and Seventh streets. | | | 54.5 | | |

a 28 side and 22 corner concrete basin tops constructed.

b Work completed in fiscal year 1909.

and permit work (assessment system), fiscal year ending June 30, 1908—Continued.

| Manholes. | Basins. | | | Branches. | Cost of materials. | Cost of labor and contingencies. | Cost of repairs to pavements. | Cost of work by plumber. | Total cost. |
|-----------|---------|-----------|------------|-----------|--------------------|----------------------------------|-------------------------------|--------------------------|-------------|
| | Built. | Re-built. | Ad-justed. | | | | | | |
| | | | | 1 | \$52.57 | \$147.79 | | | \$200.36 |
| | | | | 3 | 38.18 | 89.51 | | | 127.69 |
| | 1 | | 4 | | 36.84 | 85.38 | | | 122.22 |
| | | | | 1 | 97.83 | 357.46 | | | 455.29 |
| 1 | | | | | 143.23 | 358.98 | | | 502.21 |
| | | | | | 60.54 | 123.95 | | | 184.49 |
| | | | | 3 | 46.29 | 113.53 | | | 159.82 |
| 2 | | | | 8 | 134.30 | 260.41 | \$21.66 | | 416.37 |
| 1 | | | | 8 | 131.93 | 340.62 | 35.41 | \$3.40 | 511.36 |
| 1 | | | | 1 | 97.84 | 172.11 | 15.71 | | 285.66 |
| | | | | 14 | 377.68 | 921.53 | | | 1,299.21 |
| 1 | | | | 6 | 94.21 | 186.09 | 2.52 | | 282.82 |
| 2 | | | | | 110.44 | 179.77 | 14.19 | | 304.40 |
| 2 | | | | 6 | 237.52 | 449.77 | | | 687.29 |
| | | 2 | | | 45.91 | 73.17 | | | 119.08 |
| 1 | | | | 5 | 216.62 | 932.89 | 21.58 | | 1,171.09 |
| 2 | | | | 3 | 264.21 | 628.04 | | | 892.25 |
| 1 | | | | 1 | 108.77 | 387.88 | 5.04 | | 501.69 |
| 2 | | | | 11 | 433.02 | 1,003.22 | 95.93 | | 1,532.17 |
| 1 | | | | 1 | 130.41 | 269.68 | | | 400.09 |
| 2 | | | | 7 | 223.92 | 410.46 | 16.95 | | 651.33 |
| 2 | | | | 4 | 206.33 | 587.70 | | | 794.03 |
| 2 | | | | 15 | 240.03 | 710.33 | 3.57 | | 953.93 |
| 1 | | | | 3 | 228.31 | 905.66 | | | 1,133.97 |
| 1 | | | | 4 | 61.83 | 116.86 | | | 178.69 |
| 1 | | | | | 280.47 | 390.25 | | | 670.72 |
| 3 | | | | 1 | 342.65 | 904.83 | | | 1,247.48 |
| | | | | | 153.19 | 123.68 | | | 276.87 |
| 1 | | | | | 183.33 | 406.00 | 6.97 | | 596.30 |
| 1 | | | | 15 | 244.28 | 763.70 | | | 1,007.98 |
| 1 | | | | 3 | 176.10 | 487.83 | | | 663.93 |
| 1 | | | | | 21.12 | 35.60 | | | 56.72 |
| 1 | | 1 | | 4 | 153.91 | 388.02 | 71.57 | | 613.50 |
| 1 | | | | 9 | 174.16 | 361.18 | 58.35 | | 593.69 |
| 1 | | | | | 260.75 | 426.62 | 72.70 | | 760.07 |
| 1 | | | | | 184.62 | 411.66 | | | 596.28 |
| 1 | | | | | 202.54 | 535.39 | | | 737.93 |
| 1 | | | | 5 | 80.03 | 319.83 | | | 399.86 |
| | | | | 3 | 29.60 | 53.15 | 7.53 | | 90.28 |
| 1 | | | | 4 | 185.17 | 515.52 | | | 700.69 |
| 1 | | | | 1 | 52.40 | 212.24 | | | 264.64 |

TABLE NO. 3.—Statement of sewers laid under the appropriation for assessment

| No. of order. | Location. | Pipe sewer laid (length in feet). | | | | |
|---------------------|---|-----------------------------------|--------------|--------------|--------------|--------------|
| | | 8- inch. | 10- inch. | 12- inch. | 15- inch. | 18- inch. |
| 162 | Prout street se., between Carroll and Nicholson streets..... | 461 | | 174 | | |
| 177 | P street nw., between First and Third streets..... | | | | | |
| 191 | Porter street nw., between Idaho and Wisconsin avenues..... | | 453.8 | | | |
| 200 | Potomac street nw., between M street and C. & O. Canal..... | 17 | | | | |
| 207 | P street nw., between First and Third streets, south side..... | | | 40 | | |
| 219 | Park road nw., between Seventeenth and Eighteenth streets..... | | | 50 | | |
| 121 | Q street ne., between First and Eckington streets, north side..... | | | | 320 | |
| 123 | R street nw., between Massachusetts avenue and Twenty-second street, north side..... | | | 200 | | |
| 160 | Rhode Island avenue nw., between Second and Third streets, north side..... | | | 185 | | |
| 184 | Raum street ne., between West Virginia and Trinidad avenues..... | | | | 145.5 | 375 |
| 201 | Reservoir street nw., between Thirty-third and Thirty-fourth streets..... | | | 43.5 | | |
| 238 | R street nw., abutting lot No. 4, square 2516..... | | | 50 | | |
| 101 | Square 732..... | | 85 | | | |
| 104 | Seventh street nw., between Kennedy and Longfellow streets ^a | | 363.5 | | | |
| 108 | Sixth street nw., between F and Ninth streets, and in F street between Fifth and Sixth streets..... | | 225 | 105 | | |
| 120 | South Carolina avenue se., between Thirteenth street and Kentucky avenue ^a | | 61 | | | |
| 122 | Seventeenth and Euclid streets nw., northeast corner..... | | | 3 | | |
| 132 | Second and N streets se. ^a | | | | | |
| 139 | Sixteenth street nw., between Euclid and Fuller streets..... | | | 427 | | |
| 143 | Seventh street nw., south from Pennsylvania avenue, east side..... | | | 105 | | |
| 178 | Seventh street nw., between P and Q streets, east side..... | | | 22.5 | | |
| 210 | Seventeenth street se., between East Capitol and A streets..... | | | 240.5 | | |
| 211 | Seventeenth street se., between Massachusetts avenue and B street..... | | | 430 | | |
| 218 | Seventh street ne., between I and K streets..... | | | 119.5 | | |
| 228 | Sixth and Q streets nw., southeast corner..... | | | 6 | | |
| 232 | Square 78..... | | | 135 | | |
| 245 | Square 17..... | | | 200 | | |
| 100 | Thirty-eighth street nw., between Massachusetts avenue and Woodley road..... | | | 373 | | |
| 103 | Square 3057..... | | 57 | 116 | | |
| 107 | Square 238..... | | 88.5 | | | |
| 110 | Twenty-first street nw., from F street southward, west side..... | | | | 115 | |
| 111 | Thirteenth and Wallach streets nw., northwest corner..... | | 6 | | | |
| 116 | Twenty-ninth street nw., between K street and C. & O. Canal..... | | 512.4 | | | |
| 129 | Third street and North Carolina avenue se., northeast corner..... | | | 9 | | |
| 137 | Third street and Massachusetts avenue ne., southeast corner..... | | | 9 | | |
| 153 | Taylor street se., between Washington and Jackson streets..... | | | 209 | | |
| 161 | Square 3058..... | | 125.5 | | | |
| 167 | Third street sw., between Maine and Maryland avenues..... | | | | 128 | |
| 170 | Block 3080..... | | | 84 | 340.9 | |
| 176 | T street ne., from Lincoln road eastward, south side..... | | | 178 | | |
| 192 | Thirty-sixth street nw., between Newark and Ordway streets..... | | 599 | | | |
| 197 | Twelfth street ne., between Hamlin and Girard streets..... | | | 390 | | |
| 199 | Thirty-fourth street nw., between M street and C. and O. Canal..... | 9.5 | 42 | | | |
| 205 | Square 1065..... | | | 212 | | |
| 209 | Thirteenth street ne., between Girard and Hamlin streets..... | | | 193.5 | | |

^a Work begun in fiscal year 1907.

and permit work (assessment system), fiscal year ending June 30, 1908—Continued.

| Manholes. | Basins. | | | Branches. | Cost of materials. | Cost of labor and contingencies. | Cost of repairs to pavements. | Cost of work by plumber. | Total cost. |
|-----------|---------|-----------|------------|-----------|--------------------|----------------------------------|-------------------------------|--------------------------|-------------|
| | Built. | Re-built. | Ad-justed. | | | | | | |
| 2 | | | | 21 | \$202.55 | \$762.91 | | | \$965.46 |
| | | | | 5 | 86.09 | 200.35 | \$32.49 | | 318.93 |
| 2 | | | | 1 | 223.46 | 497.41 | | | 720.87 |
| | | | | | 6.96 | 27.59 | 3.37 | | 36.92 |
| 1 | | | | | 40.04 | 67.19 | 2.89 | | 110.12 |
| | | | | 3 | 28.70 | 68.81 | | | 97.51 |
| 1 | | | | 1 | 222.26 | 433.10 | | | 655.36 |
| 1 | | | | 1 | 114.71 | 466.18 | | | 580.89 |
| | | | | 1 | 91.38 | 225.05 | | | 316.43 |
| 3 | | | | | 475.91 | 1,014.52 | 14.44 | | 1,504.87 |
| | | | | 1 | 25.17 | 42.42 | 29.12 | | 96.71 |
| | | | | 1 | 24.83 | 67.87 | | | 92.70 |
| | | | | 6 | 35.23 | 98.21 | 19.17 | | 152.61 |
| 2 | | | | 6 | 194.97 | 847.74 | | | 1,042.71 |
| 2 | | | | 13 | 174.03 | 410.93 | 47.26 | | 632.22 |
| 1 | | | | 2 | 42.21 | 63.91 | | | 106.12 |
| | | 1 | | | 17.05 | 37.25 | | | 54.30 |
| | | | | | | 21.53 | | | 21.53 |
| 2 | | | | 1 | 265.15 | 553.64 | | | 818.79 |
| | | | | 1 | 52.23 | 210.22 | | | 262.45 |
| | | | | 1 | 13.30 | 52.86 | 2.14 | | 68.30 |
| 2 | | | | 7 | 164.62 | 483.94 | | | 648.56 |
| 2 | | | | | 271.40 | 793.78 | | | 1,065.18 |
| 2 | | | | 2 | 161.04 | 227.93 | 21.51 | | 350.43 |
| | 1 | | | | 22.04 | 39.21 | | | 61.25 |
| 1 | | | | 1 | 88.42 | 290.69 | 22.58 | | 401.69 |
| 1 | | | | 1 | 126.82 | 240.70 | 93.92 | | 461.44 |
| 1 | | | | 2 | 198.25 | 429.64 | 2.73 | | 630.62 |
| 1 | | | | 4 | 99.87 | 241.82 | | | 341.69 |
| 1 | | | | 1 | 53.88 | 134.20 | 51.36 | | 239.44 |
| 1 | | | | | 94.61 | 350.02 | 3.34 | | 447.97 |
| | | 1 | | | 22.57 | 35.38 | | | 57.95 |
| 2 | | | | 13 | 236.37 | 886.02 | | | 1,122.39 |
| | | 1 | | | 16.80 | 45.99 | | | 62.79 |
| | | 1 | | | 24.76 | 35.36 | | | 60.12 |
| 1 | | | | 2 | 121.82 | 414.02 | 1.65 | | 537.49 |
| | | | | 2 | 52.68 | 134.45 | 100.21 | | 287.34 |
| 1 | | | | 7 | 109.78 | 291.72 | 1.57 | | 403.07 |
| 1 | | | | 12 | 289.56 | 1,171.16 | | | 1,470.72 |
| 1 | | | | 1 | 118.24 | 249.27 | | \$3.11 | 370.62 |
| 2 | | | | | 277.95 | 899.81 | | | 1,177.76 |
| 1 | | | | 2 | 228.94 | 801.48 | (b) | | |
| 1 | | | | 2 | 32.89 | 40.53 | 20.92 | 4.70 | 99.04 |
| 2 | | | | 3 | 157.81 | 269.38 | | | 427.19 |
| 1 | | | | 4 | 119.35 | 397.59 | | | 516.94 |

(b) Awaiting bills repairs to pavements.

TABLE NO. 3.—Statement of sewers laid under the appropriation for assessment

| No. of order. | Location. | Pipe sewer laid (length in feet). | | | | |
|---------------------|---|-----------------------------------|--------------|--------------|--------------|--------------|
| | | 8- inch. | 10- inch. | 12- inch. | 15- inch. | 18- inch. |
| 215 | Thirteenth street ne., between Franklin and Girard streets..... | | | 225 | | |
| 230 | T street nw., between First and Second streets..... | | | 130 | | |
| 231 | T street nw., between Thirty-fifth and Thirty-sixth streets..... | | | 175 | | |
| 234 | Square 3052, north and south alley..... | | | 256 | | |
| 239 | Twentieth street ne., between Gales and Benning road and in Benning road..... | | 246.3 | | 96 | |
| 223 | Upshur street nw., between Eighth and Ninth streets..... | | | 150 | | |
| 128 | Virginia avenue and Tenth street sw., between B and Eleventh streets..... | | | 281.8 | | |
| 134 | Volta place nw., between Wisconsin avenue and Thirty-third street..... | | | 50 | | |
| 227 | Virginia avenue se., between Second and Third streets..... | | | 184 | | |
| 183 | Wisconsin avenue nw., between Newark and Ordway streets..... | | 668 | | | |
| 185 | Wisconsin avenue nw., between Ordway and Porter streets, east side..... | | 373 | | | |
| 195 | Wisconsin avenue nw. and O street, se. corner..... | | | 12 | | |
| 202 | Wisconsin avenue nw., between K and South streets..... | | 203 | | | |
| 208 | Warder street nw., between Kenyon and Lamont streets..... | | | | 275.5 | |
| 242 | Wisconsin avenue nw., between River road and Brandywine street..... | | | 200 | | |
| 248 | Wisconsin avenue nw., between Warren and Windom streets..... | | | 150.5 | | |
| | Total..... | 570.5 | 9,820.3 | 16,114.15 | 4,417.1 | 2,309.445 |

a Awaiting bills.

and permit work (assessment system,) fiscal year ending June 30, 1908—Continued.

| Manholes. | Basins. | | | Branches. | Cost of materials. | Cost of labor and contingencies. | Cost of repairs to pavements. | Cost of work by plumber. | Total cost. |
|-----------|---------|-----------|------------|-----------|--------------------|----------------------------------|-------------------------------|--------------------------|-------------|
| | Built. | Re-built. | Ad-justed. | | | | | | |
| 1 | | | | 2 | \$134.87 | \$358.60 | | | \$493.47 |
| 1 | | | | 4 | 96.51 | 177.05 | | | 273.56 |
| 1 | | | | 5 | 136.76 | 237.57 | \$77.65 | | 451.98 |
| 1 | | | | 11 | 169.45 | 353.47 | | | 522.92 |
| 1 | | | | 1 | 186.35 | 390.16 | 20.11 | | 596.62 |
| | | | | 2 | 78.38 | 213.98 | | | 292.36 |
| 2 | | | | 4 | 160.03 | 458.35 | 69.40 | | 687.78 |
| | | | | 1 | 26.10 | 81.71 | | | 107.81 |
| 1 | | | | 2 | 116.97 | 342.07 | | | 459.04 |
| 3 | | | | | 343.54 | 966.44 | | | 1,309.98 |
| 1 | | | | 1 | 163.58 | 484.57 | | | 648.15 |
| | 1 | | | | 32.72 | 43.11 | | | 75.83 |
| 1 | | | | 3 | (a) | | 36.53 | | |
| 1 | | | | 11 | 199.16 | 331.55 | | | 530.71 |
| 1 | | | | 2 | 116.72 | 393.56 | (b) | | |
| | | | | 2 | 75.75 | 321.12 | (b) | | |
| 145 | 3 | 9 | 4 | 511 | 20,828.28 | 52,480.48 | 1,688.90 | \$11.21 | 73,034.77 |

^b Awaiting bills repairs to pavements.

TABLE No. 4.—Statement of sewers laid under miscellaneous trust-fund deposits, fiscal year ended June 30, 1908.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | Manholes built. | Basins built. | Branches. | Amount of deposit. | Cost of work. | Amount returned. | For whom done. | Foreman. | Date of completion. |
|---------------|---|------------------------------------|----------|----------|----------|-----------------|---------------|-----------|--------------------|---------------|------------------|--|-----------------|---------------------|
| | | 8-inch. | 10-inch. | 12-inch. | 24-inch. | | | | | | | | | |
| 311 | Intersection Bladensburg and Benning road ne. | | | | 60 | | | | \$290.07 | \$290.07 | | Washington Railway and Electric Co. | Palmer..... | July 8, 1908 |
| 315 | Dyall street nw., between First and Second streets, north side. | 101 | | | | | | 1 | 200.00 | (a) | | Vincent Vaccaro..... | Lanigan..... | July 20, 1907 |
| 303 | Constitution avenue nw., between N street and Dupont circle. | 35 | | | | | | 1 | 100.00 | 59.11 | \$40.89 | Wm. P. Lipscomb & Co..... | Thomas..... | July 3, 1907 |
| 300 | First street and Virginia avenue sw.... | | | | | | | | (b) | 23.46 | | Philadelphia, Baltimore and Washington R. R. Co. | Robinson..... | July 23, 1907 |
| 302 | Fourteenth and Water streets sw., (intersection). | | 78 | | | | | | (c) | 170.23 | | Washington, Alexandria and Mount Vernon Ry. Co. | T. Lanigan | Dec. 7, 1907 |
| 307 | Fourteenth street nw., between Spring road and Quincy street. | | 124 | | | 1 | | 2 | 200.00 | 219.73 | 40.27 | Harry Wardman..... | Palmer..... | Jan. 24, 1908 |
| 308 | First and A streets ne..... | | | | | | | | (d) | 433.37 | | Philadelphia, Baltimore and Washington R. R. Co. | Thomas..... | May 4, 1908 |
| 313 | First street east between B street south and C street north. | 96 | | | | | 10 | | (e) | 580.62 | | do..... | Lanigan..... | Dec. 17, 1907 |
| 309 | G street ne., near Terminal Wall. | | | | | | | | (f) | 9.36 | | Baltimore and Ohio R. R. Co. | do..... | Dec. 19, 1907 |
| 310 | New York avenue, H and Thirteenth streets nw. | | 27 | | | | | | 75.00 | 55.80 | 19.20 | Thompson, Starrett Co..... | Palmer..... | Sept. 12, 1907 |
| 305 | R street nw., opposite Sheridan circle. | | 3 | | | | 1 | | 80.00 | 57.25 | 22.75 | Fred Drew..... | J. Lanigan..... | Mar. 28, 1908 |
| 312 | Bureau of American Republics, Seventeenth and C streets nw. ^g | | | | | | | | 10.00 | 5.74 | 4.26 | R. J. Beall Construction Co. | King..... | Aug. 14, 1907 |
| 301 | South Capitol street at northeast corner Ivy and northwest corner Canal street. | | | | | | | | (h) | 4.48 | | Philadelphia, Baltimore and Washington R. R. Co. | Lanigan..... | Oct. 7, 1907 |
| 304 | Square 235..... | 98 | | | | | 1 | | 190.00 | 190.00 | | Capital Traction Co..... | do..... | Sept. 27, 1907 |
| 306 | Square 1056..... | 45 | | | | | 3 | | 140.00 | 56.16 | 83.84 | Kennedy & Davis Co..... | Ward..... | June 8, 1908 |
| 314 | Thirty-eighth street nw., from Fulton street, northward. | | 198 | | | | | | (i) | 278.75 | | Wm. F. Matheson..... | do..... | |
| | Total..... | 232 | 221 | 352 | 60 | 1 | 11 | 8 | 1,345.07 | 2,434.13 | 211.21 | | | |

^f Moving manhole charged to general deposit No. 183.^g Flushing sewer.^h 2 basins abandoned, charged to general deposit No. 11064.ⁱ Charged to deposit for and in connection with contract work.^a Awaiting bills for repairs to pavements.^b Repairing sewer charged to general deposit No. 111.^c Charged to deposit No. 11441.^d 45 feet of 3-foot diameter sewer reconstructed, charged to general deposit No. 12573.^e 636 feet of 6-inch connections were also laid, cost of work charged to general deposit No. 12573.

TABLE NO. 5.—Statement of work done by day labor under the appropriation for main and pipe sewers, fiscal year ended June 30, 1908.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | | 4 feet diameter. | Manholes rebuilt. | Basins rebuilt. | Manholes built. | Basins built. | Branches. | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Cost of work by plumber. | Total cost. |
|---------------|---|------------------------------------|----------|----------|----------|----------|------------------|-------------------|-----------------|-----------------|---------------|-----------|--------------------|----------------|-------------------------------|--------------------------|-------------|
| | | 10-inch. | 12-inch. | 15-inch. | 18-inch. | 21-inch. | | | | | | | | | | | |
| 518 | Eleventh street nw., between F and G streets. | | | | 140 | | | | | 1 | | 1 | \$134.22 | \$613.22 | \$170.31 | | \$917.75 |
| 546 | Eighth street sw., at northeast corner I and K streets. | | | | | | | | | | 2 | | 48.57 | 62.50 | | | 111.07 |
| 526 | Euclid street and Columbia road nw. (north-east corner) | 36 | | | | | | | | | 1 | | 37.01 | 51.12 | 8.71 | | 96.84 |
| 503 | Square 859, between Sixth, Seventh, G and H streets ne. | | | | 136 | | (a) | | | 1 | | 14 | 140.30 | 205.49 | 108.20 | \$14.08 | 469.07 |
| 502 | do | | | | 244 | | | | | 1 | | 2 | 208.32 | 410.97 | 191.56 | 4.14 | 875.99 |
| 510 | Eleventh street and Columbia road nw. (north-east corner) | 21 | | | | | | | | | 1 | | 30.00 | 46.20 | | | 76.20 |
| 529 | Eighteenth street and Jennings road ne. | | 60 | | | | | | | | 2 | | 55.12 | 88.42 | | | 173.87 |
| 540 | Eighteenth and E streets ne. | | 42 | | | | | | | | 2 | | 62.40 | 67.66 | | | 130.15 |
| 534 | Eighteenth and Kenyon streets nw. (north-east corner) | | | | 45 | | | | | 1 | 1 | | 85.17 | 152.71 | | | 237.88 |
| 557 | Fourteenth and D streets nw. (north-east corner) | | 21 | | | | | | | | 1 | | | | | | 70.72 |
| 507 | Fourteenth and Harvard streets nw. (north-west corner) | | 21 | | | | | | | | 1 | | 32.80 | 37.92 | | | 70.72 |
| 508 | Fourth and Randolph streets ne. | 12 | | | | | | | | | 1 | | 44.34 | 79.58 | 15.98 | | 139.90 |
| 509 | Fourteenth street and Pennsylvania avenue nw | 99 | | | | | | | 1 | | | | 22.42 | 26.67 | | | 49.09 |
| 511 | First and N streets ne. (northeast corner) | 36 | | | | | | | | 1 | | | 105.76 | 415.77 | | | 521.53 |
| 515 | Fifteenth and Q streets nw. (southeast corner) | | | | | | (b) | | | | 1 | | 33.17 | 44.11 | | | 77.28 |
| 327 | Fifteenth street and Ames place ne. (southwest corner) | | | | | | | | | | | | 20.10 | 19.64 | | | 39.74 |
| 528 | Second and N streets ne. | 21 | | | | | | | | | 1 | | 31.72 | 45.32 | | | 77.04 |
| 533 | First and Adams streets nw. (northeast corner) | | | | | | (c) | | | | | | 17.24 | 11.00 | | | 28.24 |
| 536 | Fifteenth and E streets se. (northeast corner) | 21 | | | | | | 1 | | | | | 25.19 | 29.69 | | | 54.88 |
| 538 | Fourteenth street and Spring road nw. | 33 | | 90 | | | | | | 2 | 1 | | 35.79 | 56.41 | | | 92.20 |
| 543 | Fifteenth and A streets ne. (southwest corner) | 30 | | | | | | | | | 1 | | 264.78 | 296.21 | | | 560.99 |
| 562 | First and Patterson streets ne. (northwest corner) | | | | | | | | | | | | 37.47 | 52.50 | | | 89.97 |
| 553 | First and N streets ne. (northwest corner) | 36 | | | | | | | | | 1 | | 37.18 | 46.70 | | | 83.88 |
| 555 | First street ne., just north of H street (east side) | 42 | | | | | | | | | 1 | | 39.90 | 53.92 | | | 93.82 |
| 554 | First and Pierce streets ne. (northwest corner) | 9 | | | | | (d) | | | | 1 | | 27.64 | 32.46 | | | 62.10 |
| 513 | Kenyon street nw., east of Brightwood avenue (north side) | 33 | | | | | | | | | 1 | | 9.09 | 23.31 | | | 32.40 |
| | | | | | | | | | | | | | 33.67 | 39.75 | | | 73.42 |

a 30 feet of 6-inch sewer constructed.

b Work begun in fiscal year 1907.

c Constructing forms for basin tops.

d Work completed in fiscal year 1909.

TABLE NO. 5.—Statement of work done by day labor under the appropriation for main and pipe sewers, fiscal year ended June 30, 1908—Cont'd.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | | 4 feet diameter. | Manholes rebuilt. | Basins rebuilt. | Manholes built. | Basins built. | Branches. | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Cost of work by plumber. | Total cost. |
|---------------|--|------------------------------------|----------|----------|----------|----------|------------------|-------------------|-----------------|-----------------|---------------|-----------|--------------------|----------------|-------------------------------|--------------------------|-------------|
| | | 10-inch. | 12-inch. | 15-inch. | 18-inch. | 21-inch. | | | | | | | | | | | |
| 535 | Keating and Prospect streets and Lincoln road (northeast corners) | | 51 | | | | | | | | 2 | | \$78.30 | \$93.13 | | | \$171.43 |
| 534 | Morris road between Bryant place and Spring street | | 18 | | | | | | | | 1 | | 33.24 | 35.12 | | | 68.36 |
| 537 | Morris street n.w., between Fifth and Sixth streets | | 45 | | | | | | | | 2 | | 75.71 | 104.54 | | | 180.25 |
| 548 | Massachusetts avenue n.w., between Fourth and Fifth streets | | 175 | | | | (a) | | | 1 | | 8 | 147.67 | 464.79 | | \$7.74 | 620.20 |
| 500 | Ninth and H streets ne. | | 18 | | 6 | | | | | | 1 | | 57.54 | 37.94 | \$6.68 | | 91.28 |
| 532 | Ninth and K streets se. (northeast and northwest corners) | | 36 | | | | (b c) | | | 2 | | | 59.40 | 83.76 | | | 143.16 |
| 506 | New Jersey avenue se., between M and N streets | | | | | | (d) | | | | | | 3.00 | 34.69 | | 7.86 | 104.23 |
| 505 | | | | | | | | | | | | | 58.68 | 73.00 | | | 238.21 |
| 546 | Square 116, between M, N, Nineteenth, and Twentieth streets nw. | 12 | 18 | | | | | | | 1 | 3 | | 71.35 | 113.70 | | | 185.05 |
| 512 | Pennsylvania avenue between Fourteenth and Fifteenth streets nw. | 306 | | | | | | | | 1 | | | 178.13 | 920.72 | 31.18 | | 1,130.03 |
| 520 | Pennsylvania avenue and E street nw. (east end of triangle) | 51 | | | | | | | | | 1 | | 45.74 | 66.72 | | | 112.46 |
| 504 | Rhode island avenue nw., just east of First street | 24 | | | | | | | | | 2 | | 48.43 | 61.29 | | | 109.72 |
| 539 | Square 73, between Twenty-first, Twenty-second, K, and L streets nw. | 247 | | | 173 | | (a) | 2 | | | | 3 | 461.71 | 977.26 | 271.11 | 1.87 | 1,711.95 |
| 541 | | | | | | | | 1 | | | | 10 | 275.07 | 512.20 | 160.68 | 2.83 | 950.78 |
| 549 | Sixth street between Maine and Missouri avenues. | 96 | | | | | | | | | 4 | | 124.25 | 155.48 | | | 279.73 |
| 551 | Square 78, between Twentieth, Twenty-first, and K streets. | 141 | | | | | | | | 1 | | | 92.94 | 318.75 | 16.75 | | 428.44 |
| 525 | Spring road and Holmead place nw. | | | | 18 | | | | | | | | 11.61 | 23.67 | | | 35.28 |
| 523 | Second street ne. between N street and Florida avenue | 38 | | | | | | | | | | 1 | 20.05 | 22.83 | | | 42.88 |
| 531 | Seventh and Shepherd streets nw. (southeast corner) | 9 | | | | | | | | | 1 | | 31.93 | 36.64 | | | 68.57 |
| 530 | Seventh and Shepherd streets nw. (southwest corner) | | | | | | | | | | | | 42.80 | 57.56 | | | 100.36 |
| 517 | Sixth street nw., opposite Trumbull street. | 48 | 18 | | | | | | | | 1 | | 21.97 | 33.47 | | | 55.44 |

| | | | | | | | | | | | | | | |
|-----|--|-------|-------|-------|-------|---------|--------|-------|-------|--------|----------|-------|----------|-----------|
| 501 | Thirteenth street nw., crossing Pennsylvania avenue..... | 3 | 6 | 3 | 12 | 6172.40 | ..... | ..... | ..... | 140.33 | 290.46 | ..... | ..... | 430.79 |
| 514 | Thirteenth street nw., between Pennsylvania avenue and E street..... | ..... | ..... | ..... | ..... | 177.00 | ..... | ..... | ..... | 376.50 | 1,051.00 | ..... | ..... | 1,427.50 |
| 516 | Twenty-and-a-half street nw., just north of K street..... | 45 | ..... | 3 | 9 | ..... | ..... | ..... | ..... | 72.84 | 104.67 | ..... | ..... | 177.51 |
| 522 | Twelfth and B streets nw..... | 69 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 99.23 | 239.03 | ..... | ..... | 338.26 |
| 521 | Twentieth street and Sunderland place nw. (northeast corner)..... | ..... | 15 | ..... | ..... | ..... | ..... | ..... | ..... | 19.81 | 47.99 | 4.23 | ..... | 72.03 |
| 542 | T street ne. between North Capitol street and Lincoln road..... | ..... | 45 | ..... | ..... | ..... | ..... | ..... | ..... | 62.35 | 79.41 | 3.57 | ..... | 145.33 |
| 547 | Twenty-third and Q streets nw. (northwest corner)..... | ..... | 39 | ..... | ..... | ..... | ..... | ..... | ..... | 43.11 | 50.33 | ..... | ..... | 93.44 |
| 556 | Thirteen-and-a-half street nw., just north of D street..... | 24 | 12 | ..... | ..... | ..... | ..... | 1 | 1 | 57.48 | 72.81 | ..... | ..... | 130.29 |
| 550 | Thirteen-and-a-half street nw., between D and E streets..... | ..... | 157 | ..... | ..... | ..... | ..... | 2 | 2 | 145.87 | 402.79 | ..... | 13.27 | 561.93 |
| | Total..... | 393 | 1,867 | 268 | 539 | 244 | 349.40 | 3 | 5 | 14 | 51 | 47 | 4,772.23 | 9,596.60 |
| | | | | | | | | | | | | | 1,020.29 | 15,440.91 |

^a Includes 15 feet of 6-inch sewer constructed.

^b Work begun in fiscal year 1907.

^c Constructing shed in yard at sewage pumping station.

^d Constructing 99 concrete basin tops.

TABLE NO. 6.—Statement of work done by day labor under appropriation for suburban sewers, fiscal year ended June 30, 1908.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | | | Branches. | Man-holes built. | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Total cost. |
|---------------|--|------------------------------------|----------|----------|----------|----------|----------|-----------|------------------|--------------------|----------------|-------------------------------|-------------|
| | | 8-Inch. | 10-Inch. | 12-Inch. | 15-Inch. | 18-Inch. | 21-Inch. | 24-Inch. | | | | | |
| 807 | Brightwood avenue, between Battle Cemetery and Butternut street (west side). | | 492 | | | | | | 1 | \$205.44 | \$447.58 | ..... | a \$553.02 |
| 817 | Davenport street n.w., just west of River road. | | | | | | | | | 159.55 | 327.59 | ..... | 487.14 |
| 813 | Flood street n.w., between Quincy street and Arkansas avenue. | | | | 300 | | | | 1 | 219.43 | 593.33 | ..... | 782.76 |
| 814 | Fourteenth street n.w., between Arkansas avenue and Shepherd street. | | | 295.5 | | | | | | 138.76 | 343.78 | ..... | 482.54 |
| 810 | Fourteenth street n.w., between Quincy and Shepherd streets. | | | 439.5 | | | | | 8 | 274.59 | 938.40 | ..... | 1,212.99 |
| 811 | Fourteenth street n.w., between Arkansas avenue and Shepherd street. | 92 | | | | 440 | | 80 | 2 | 250.08 | 562.98 | ..... | 813.06 |
| 812 | Morse street n.e., between Montello street and West Virginia avenue. | | | | | | | | 2 | 387.88 | 968.96 | ..... | 1,356.83 |
| 819 | North Railroad avenue, from Carol street eastward. | | | | | | 301 | 332 | 1 | 366.80 | 519.21 | ..... | 886.01 |
| 816 | Delaware and Florida avenues. | | | | | | | | 1 | 480.88 | 1,341.38 | ..... | 1,822.26 |
| 804 | Trinidad avenues. | | | | | | | | 2 | 286.12 | 627.66 | ..... | b 315.82 |
| 815 | Ram street n.e., between Montello and Spring streets. | | | | 406 | | | | 1 | 131.95 | 513.89 | ..... | c 646.75 |
| 805 | Spring street, between Montello and Columbia road. | | | 93.8 | | | | | 1 | 71.83 | 147.78 | \$87.69 | 287.30 |
| 803 | do. | | | 126 | | | | | 1 | 60.49 | 141.93 | 90.09 | 292.51 |
| 802 | Twentieth street and Adams Mill road n.w. | | | | | | | 45 | 1 | 81.55 | 128.01 | ..... | 209.56 |
| 808 | West Virginia avenue and Neil street n.e. | | 3 | | | | | | 1 | .68 | 24.88 | ..... | 25.56 |
| | Total. | 92 | 495 | 954.8 | 706 | 440 | 301 | 457 | 13 | 3,116.63 | 7,913.08 | 157.78 | 11,187.49 |

a Includes \$31.10, cost of contingencies.

b Moving material from Parker street property yard.

c Reenforcing arch of Spring road sewer.

TABLE No. 7.—Statement of work done by day labor under allotment for sewer division, charged appropriation "Elimination of grade crossings, District of Columbia," fiscal year ended June 30, 1908.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | Man-holes. | | Basins. | | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Total cost. |
|---------------|---|------------------------------------|----------|----------|----------|------------|--------|----------|--------|--------------------|----------------|-------------------------------|-------------|
| | | 10-inch. | 12-inch. | 15-inch. | 18-inch. | 24-inch. | Built. | Rebuilt. | Built. | | | | |
| 425 | C street sw., between Sixth and Ninth streets. | | | | | 465 | 2 | | | \$685.02 | \$1,781.06 | | \$2,466.08 |
| 426 | C street sw., on west building line of Eighth street ^a | | | | | | | | | | 2.83 | | 2.83 |
| 428 | C and Seventh streets sw. (north roadway, northwest corner). | | | | | | | | | 23.97 | 26.75 | | 50.72 |
| 430 | Canal and E streets se. (northeast corner). | | | | | 9 | | | 1 | 11.64 | 37.56 | | 49.20 |
| 431 | C street just west of Seventh street sw. (south side north roadway). | | | | | 24 | | | 1 | 34.36 | 36.08 | | 70.44 |
| 432 | D street sw. between Ninth and Tenth streets (south side). | | | | | 441 | 2 | | | 251.87 | 512.11 | \$56.30 | 829.28 |
| 439 | Delaware avenue and E street sw. (northeast corner). | | | | | 12 | | | 1 | 19.30 | 22.92 | | 42.22 |
| 440 | D street sw. between Thirteenth and Thirteenth-and-a-half streets. | | | | | 81 | | | 4 | 84.06 | 143.41 | | 227.47 |
| 448 | E street sw., between Thirteenth and Thirteenth-and-a-half streets. | | | | | 93 | | | 6 | 91.39 | 131.29 | | 222.68 |
| 450 | First street ne., just north of U street east side ^b | | | | | | | | | | 5.08 | | 5.08 |
| 459 | Fourth street sw., between Maryland avenue and D street ^c | | | | | 135 | | | 5 | 164.75 | 305.64 | | 470.39 |
| 458 | First and M streets ne. (northwest corner) | | | | | 18 | | | 1 | 26.55 | 32.47 | | 59.02 |
| 455 | First and L streets ne. (northwest corner) | | | | | 18 | | | 1 | 16.42 | 29.50 | | 45.92 |
| 456 | First street ne., just north of K street (east side). | | | | | 21 | | | 1 | 27.48 | 33.75 | | 61.23 |
| 457 | Fourth-and-a-half street sw. (south roadway of Virginia avenue). | | | | | 45 | | | 1 | 47.95 | 71.17 | | 119.12 |
| 448 | F street ne., between Second and Third streets. | | | | | 63 | | | 2 | 46.31 | 104.02 | | 153.33 |
| 405 | Fourth street and Maryland avenue sw. (northwest corner) ^a | | | | | | | | | | 2.33 | | 2.33 |
| 415 | Fourth and I streets ne. | | | | | 30 | | | 2 | 87.58 | 108.50 | | 196.08 |
| 427 | Fifth and I streets ne. | | | | | 69 | 2 | | 3 | 155.65 | 178.88 | 25.29 | 359.82 |
| 429 | Fourth-and-a-half street and south roadway Virginia avenue sw. | | | | | 15 | | | 1 | 16.12 | 22.92 | | 39.04 |
| 441 | First and F streets sw. ^d | | | | | | | | | | 4.37 | | 4.37 |
| 402 | First and Canal streets se. (northeast corner). | | | | | 15 | | | 1 | 21.06 | 31.74 | | 52.80 |
| 420 | Ninth and Canal streets se. (between M and N streets ^c | | | | | 30 | 1 | | 1 | 127.54 | 185.46 | | 312.80 |
| 417 | New Jersey avenue se., (between M and N streets ^c | | | | | 63 | | | 1 | 154.65 | 115.22 | | 269.87 |
| 416 | Ninth and I streets se. (northeast corner) | | | | | | | | 1 | 40.50 | 55.36 | | 95.86 |
| 418 | Ninth and J streets se. (between M and N streets ^c | | | | | 18 | | | 2 | 46.81 | 62.24 | | 109.05 |
| 403 | New Jersey avenue west side, just north of Ivy street se. | | | | | 6 | 27 | | 1 | 25.63 | 28.30 | | 53.93 |
| 450 | Ninth and D streets sw. (southwest corner). | | | | | 6 | | | 1 | 24.62 | 25.98 | | 50.60 |
| 451 | Ninth and D streets sw. (southwest corner). | | | | | 30 | | | 1 | 47.03 | 40.58 | | 87.61 |
| 449 | Ninth and D streets sw. (northwest corner) | | | | | 45 | | | 1 | 148.48 | 108.50 | | 256.98 |
| 440 | New Jersey avenue se., between M and N streets ^c | | | | | | | | 1 | 112.96 | 166.63 | | 279.59 |
| 454 | Sixth street sw., between C street and Virginia avenue | | | | | 216 | | | | 102.40 | 111.18 | | 213.58 |
| 446 | Sixth street sw., between C street and Virginia avenue | | | | | 51 | | | 2 | 23.70 | 24.47 | | 48.17 |
| 452 | Sixth street nw., just south of Missouri avenue | | | | | 9 | | | 1 | 36.12 | 52.77 | | 88.89 |
| 453 | Sixth street nw., west side, 200 feet north of B street. | | | | | 36 | | | 1 | 110.47 | 161.45 | | 271.95 |
| 443 | Second street ne., between California avenue and F street. | | | | | 117 | | | 4 | | | | |

^c Constructing concrete basin tops.^c 3 basins and 1 manhole adjusted to grade.^d Catch basin adjusted to grade.^a 1 catch basin abandoned.^b Work completed in fiscal year 1909.

TABLE No. 7.—Statement of work done by day labor under allotment for sewer division, charged appropriation "Elimination of grade crossings, District of Columbia," fiscal year ended June 30, 1908—Continued.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | | Man-holes. | | Basins. | | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Total cost. |
|---------------|---|------------------------------------|----------|----------|----------|------------|--------|----------|--------|--------------------|----------------|-------------------------------|-------------|
| | | 10-Inch. | 12-Inch. | 15-Inch. | 18-Inch. | 24-Inch. | Built. | Rebuilt. | Built. | | | | |
| 413 | Second and F streets ne. (northeast corner) ^a | | 33 | | | | | | 2 | \$62.04 | \$3.50 | | \$3.50 |
| 414 | Second and G streets ne. (southeast and southwest corners) | | 15 | | | | | | 1 | 26.50 | 85.83 | | 147.87 |
| 445 | Sixth and B streets sw. (southwest corner) | | | | | | | | | | 2.83 | | 2.83 |
| 447 | Sixth and C streets sw. (southwest corner) ^a | | | | | | | | | | 2.83 | | 2.83 |
| 436 | Sixth and Maryland avenue sw. (southwest corner) | | 30 | | | | | | 1 | 33.74 | 25.37 | | 59.11 |
| 404 | South Capitol and Canal streets (northwest corner) | | 21 | | | | | | | 17.70 | 37.23 | | 54.93 |
| 406 | Square 754, between Second Third, E, and F streets ne. | 9 | 126 | | | | | | 2 | 144.59 | 187.29 | | 331.88 |
| 411 | Second and I streets ne. (southeast corner) ^b | | | | | | | | 1 | 2.15 | 7.63 | | 9.78 |
| 419 | Square 749, between Second Third, K, and L streets ne. | | | | | | | | | 45.65 | 118.01 | | 163.66 |
| 420 | Sixth street sw., between D street and Virginia avenue. | | 30 | | | | | | 1 | 59.16 | 138.04 | | 197.20 |
| 423 | Second street and Virginia avenue sw. (northwest corner) | | | | | | | | | 16.14 | 58.32 | | 74.46 |
| 428 | Sixth and I streets ne. (northwest and southwest corners) | 6 | | | | | | | 1 | 4.02 | 75.36 | | 79.38 |
| 444 | South Capitol street, between E and G streets. | | | | | | | | 1 | 19.18 | 27.62 | | 46.80 |
| 433 | Twelfth street and Maryland avenue sw. (southeast corner) ^a | | | | | | | | | | 2.83 | | 2.83 |
| 442 | Third street and north roadway, Virginia avenue sw. (northeast and northwest corners) | 36 | | | | | | | 2 | 55.57 | 66.98 | | 122.55 |
| 432 | Twelfth and D streets sw. (southeast corner) | | 54 | | | | | | 1 | 50.32 | 44.61 | | 94.93 |
| 412 | Tenth and D streets sw. (southeast and southwest corners) ^c | | | | | | | | | | 8.42 | | 8.42 |
| 438 | Virginia avenue and Delaware avenue sw. | 21 | 75 | | | | | | | 71.61 | 86.35 | | 157.96 |
| 437 | Virginia avenue and Hall street sw. | 33 | 75 | | | | | | 1 | 84.11 | 104.23 | | 188.34 |
| 443 | Virginia avenue sw., between South Capitol street and Delaware avenue ^d | | | | | | | | | 4.98 | 7.83 | | 12.81 |
| 421 | Virginia avenue sw., between Fourth and a-half and Seventh streets ^c | | | | | | | | | 22.74 | 68.44 | | 92.18 |
| 424 | Virginia avenue sw., between Fourth and a-half and Sixth streets | | 6 | | | | | | 1 | 23.44 | 26.91 | | 50.35 |
| 423 | Virginia avenue and First street sw. | 66 | 48 | | | | | | 2 | 91.53 | 116.91 | | 208.44 |
| 435 | Virginia avenue and Delaware avenue sw. | 99 | | 96 | | | | | 3 | 179.79 | 207.70 | | 387.49 |
| Total | | 561 | 2,032 | 96 | 81 | 465 | 9 | 2 | 66 | 6 | 3,870.75 | 6,253.45 | \$81.59 |
| | | 10,205.79 | | | | | | | | | | | |

^a 1 catch basin abandoned.^b 1 catch basin and 1 manhole adjusted to grade.^c 2 catch basins adjusted to grade.^d 2 manholes adjusted to grade.^e 5 manholes adjusted to grade.

TABLE No. 8.—Statement of work done by day labor under miscellaneous appropriations, fiscal year ended June 30, 1908.

| No. of order. | Location. | Pipe sewers laid (length in feet). | | | Man- holes. | | Basins. | | | Cost of materials. | Cost of la- bor and contin- gences. | Total cost. | Appropriation. |
|---------------------|---|--|----------|----------|----------------|-------|---------|---------|-----------|-----------------------|--|----------------|--|
| | | 10-inch. | 12-inch. | 15-inch. | Adjusted. | Bult. | Bult. | Rebult. | Adjusted. | | | | |
| | | | | | | | | | | | | | |
| 1008 | Twenty-ninth street n.w., north of Chesapeake and Ohio Canal. | | 51 | | | | | 2 | | \$55.56 | \$76.72 | \$132.28 | Improvements and repairs, George town. |
| 1038 | Thirteenth and D streets n.w. (northwest corner). | | 6 | | | | | 1 | | 26.26 | 30.17 | 56.43 | Improvements and repairs, northwest section. |
| 1034 | E street ne., between Seventh and Eighth streets. | | | | | | | 3 | | 51.48 | 101.93 | 153.41 | Improvements and repairs, northeast section. |
| 1006 | G street ne., between Ninth and Thirteenth streets. | 6 | 60 | | | | | 13 | | 262.04 | 479.38 | 741.42 | Do. |
| 1010 | South Capitol and D streets (northeast corner). | | 24 | | | | | 1 | | 34.10 | 54.02 | 88.12 | Do. |
| 1036 | Elghth and K streets s.w. (northwest corner). | | 15 | | | | | 1 | | 18.51 | 30.38 | 48.89 | Improvements and repairs, southwest section. |
| 1015 | Tenth and L streets se. | | | | | | | 2 | | 34.32 | 62.84 | 97.16 | Do. |
| 1022 | Ninth street and Virginia avenue se. (northeast corner). | | 12 | | | | | 1 | | 4.99 | 9.00 | 13.99 | Improvements and repairs, southeast section. |
| 1026 | Ninth street at northeast and northwest corners I and G streets se. | | | | | | | 4 | | 82.85 | 150.27 | 233.12 | Do. |
| 1025 | South Capitol and E streets (northeast corner). | | 9 | | | | | 1 | | 27.12 | 42.15 | 69.27 | Repairs to streets. |
| 1000 | Pennsylvania avenue n.w. between Sixth and Fifteenth streets. | | 111 | 12 | | | | 7 | | 193.79 | 318.53 | 512.32 | Do. |
| 1011 | Pennsylvania avenue n.w. and Thirteen-and-one-half street (southwest corner). | | | | | | | 1 | | 5.68 | 29.22 | 34.90 | Do. |
| 1007 | Newton street n.w., between Fourteenth street and Piney Branch road. | | | | 2 | | | | 2 | 13.72 | 69.67 | 83.39 | Repairs to county roads. |
| 1005 | Newton street n.w., between Fourteenth and Sixteenth streets. | 33 | | | | | | | 3 | 43.25 | 126.15 | 169.40 | Do. |
| 1031 | Sixteenth street and Spring road n.w. | | | | 2 | | | | | 31.63 | 71.19 | 102.82 | Grading Sixteenth street. |
| 1037 | Massachusetts avenue n.w., east of Arizona avenue. | | | | | | | | | | 76.50 | 76.50 | Grading and improving Massachusetts avenue extended. |
| 1029 | R street and Lincoln road ne. (northeast corner). | | | | 1 | | | | | 4.55 | 7.91 | 12.46 | Improving Lincoln road. |
| 1027 | Lincoln road at northeast corners R and T streets. | | 21 | | | | | 2 | | 48.94 | 90.46 | 139.40 | Do. |
| 1028 | Lincoln road, between S and Randolph streets ne. | | | | 2 | | | | | 3.11 | 3.41 | 4.52 | Do. |
| 1035 | Kalorama road and Champlain avenue n.w. (northwest corner). | | 39 | | | | | 1 | | 39.60 | 49.87 | 89.47 | Paving Kalorama road. |
| 1023 | Connecticut avenue n.w., between Kalorama avenue and Calvert street. | | 33 | 285 | | | | 6 | | 258.76 | 396.98 | 655.74 | Paving approaches Connecticut Avenue Bridge. |
| 1013 | Connecticut avenue n.w., between Wyoming and Kalorama avenues. | 153 | 85 | | | | | 1 | 6 | 195.77 | 388.84 | 584.61 | Do. |
| 1024 | Eleventh and O streets se. | | 30 | | | | | 2 | | 55.94 | 89.03 | 144.97 | Approaches, etc., Anacostia Bridge. |
| | Total. | 225 | 748 | 12 | 7 | 1 | 30 | 27 | 2 | 1,489.97 | 2,754.62 | 4,244.59 | |

^a Includes \$4.58, cost of work by plumber.

TABLE No. 9.—Statement of work performed in connection with the sewage-disposal system, by day labor, in the fiscal year ended June 30, 1908.

| Job No. | Location. | Character of work. | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Total cost. | Appropriation. |
|---------|---|---|--------------------|----------------|-------------------------------|-------------|---|
| 1001 | Various locations..... | Making sewer connections..... | \$2,940 08 | \$8,863 96 | ^a \$238 06 | \$12,042 10 | B street and New Jersey avenue, trunk sewer, section F. |
| 1002 | do..... | do..... | 1,808 50 | 3,533 39 | 7 36 | 5,349 25 | Water and L streets, intercepting sewer. |
| 1003 | Water street sw., between Seventh and Fourteenth streets..... | Making interceptor connections..... | | 31 36 | | 6 31 36 | Do. |
| 1014 | Four-and-a-half street sw., between C and L streets..... | Making sewer connections..... | 428 19 | 801 54 | 24 11 | 1,253 84 | Unused balances. |
| 1017 | Fifteenth street and Pennsylvania avenue nw..... | Constructing regulator chamber..... | 248 72 | 577 96 | | 826 68 | Do. |
| 1020 | Twenty-first and A streets ne..... | Constructing connection of east side intercepting sewer and boundary sewer, including gate chamber. | | 6,328 85 | | | Do. |
| 1032 | do..... | Improving and repairing outlet of boundary sewer..... | | 2,305 77 | | | Do. |
| 1033 | do..... | Constructing superstructure of gate chamber..... | 443 78 | 870 82 | | 1,314 60 | Do. |
| 1019 | Grimes, on the Potomac River..... | Constructing superstructure of outlet chamber..... | 901 14 | 1,282 33 | | 2,183 47 | Outfall sewer and siphon. |
| 1021 | Insane Asylum grounds..... | Reconstructing north and south walls..... | 203 50 | 354 50 | | 558 00 | Do. |
| 1030 | Insane Asylum grounds, south end of..... | Constructing 24-inch underdrain..... | 1,417 51 | 2,006 66 | | 3,424 17 | Do. |

^b Work completed in fiscal year 1909.^a Includes \$11.07, cost of work performed by water department.

TABLE NO. 10.—*Number of inspectors and other employees of the sewer division and disbursing office temporarily employed, and the appropriations from which paid, for the fiscal year ended June 30, 1908.*

[This table includes the cost of wagons, teams, and carts.]

| Appropriations. | Amounts expended for— | | | |
|--|-----------------------|---------------|------------|------------|
| | 20 inspectors. | 322 laborers. | 32 teams. | 2 foremen. |
| I. Construction, sewerage system: | | | | |
| Main and pipe..... | \$576.25 | \$6,138.75 | \$2,496.15 | \$2.00 |
| Suburban..... | 2,894.25 | 5,912.67 | 1,831.00 | 93.63 |
| Assessment and permit..... | 792.50 | 39,576.69 | 12,810.28 | 375.86 |
| Elimination of grade crossings..... | | 4,168.22 | 1,559.25 | 26.00 |
| Improvements and repairs, northwest section..... | | 17.31 | 8.50 | |
| Improvements and repairs, northeast section..... | | 235.94 | 132.50 | |
| Improvements and repairs, southwest section..... | | 134.28 | 70.00 | |
| Improvements and repairs, southeast section..... | | 128.80 | 62.75 | |
| Improvements and repairs, Georgetown..... | | 44.75 | 21.50 | |
| Grading and improving Lincoln road..... | | 67.47 | 26.00 | |
| Paving Kalorama road..... | | 35.53 | 16.75 | |
| Grading and improving Massachusetts avenue..... | | 6.50 | 70.00 | |
| Grading and improving Sixteenth street extended..... | 16.00 | 39.62 | 20.00 | |
| Anacostia Bridge..... | | 50.13 | 27.00 | |
| Connecticut Avenue Bridge..... | | 469.93 | 222.50 | |
| Repairs to county roads..... | | 108.87 | 59.50 | |
| Repairs to streets..... | | 215.46 | 121.75 | |
| Miscellaneous trust-lund deposits— | | | | |
| Chesapeake and Potomac Telephone Co..... | 1,216.00 | | | |
| Western Union Telegraph Co..... | 168.00 | | | |
| Chapin & Sacks Manufacturing Co..... | 8.00 | | | |
| Washington Railway and Electric Co., No. 13141..... | | 110.06 | 27.75 | |
| Philadelphia, Baltimore and Washington R. R. Co., No. 12573..... | | 259.99 | 106.50 | |
| H. Wardman, No. 12588..... | | 77.59 | 40.00 | 4.50 |
| Vincent Vaccaro, No. 13959..... | | 70.15 | 18.50 | |
| Henry Schneider, No. 14173..... | | 7.75 | | |
| Thompson Starrett Co., No. 12710..... | | 32.72 | 4.00 | |
| Baltimore and Ohio R. R. Co., No. 183..... | | 4.50 | 1.50 | |
| R. J. Beall Construction Co., No. 13459..... | | 3.28 | | |
| William F. Matteson..... | | 324.66 | 145.25 | |
| Arizona avenue sewer..... | 1,000.00 | | | |
| Falls Branch sewer..... | 1,000.00 | | | |
| Broad Branch and Soapstone Branch..... | 721.00 | | | |
| II. Construction, sewerage-disposal system: | | | | |
| Unused balances..... | 1,283.50 | 29,224.67 | 2,412.25 | |
| Outfall sewer and siphon..... | 1,808.50 | 10,229.78 | 849.25 | 2.00 |
| Sewerage pumping station..... | 224.00 | | | |
| Water and L streets intercepting sewer..... | | 3,023.13 | 726.25 | |
| East side intercepting sewer, boundary to Brookland..... | 1,501.50 | | | |
| B street and New Jersey avenue trunk sewer, section F..... | 579.00 | 7,562.14 | 1,987.50 | |
| Outlet to old B street sewer..... | 315.00 | | 59.50 | |
| III. Maintenance: | | | | |
| Cleaning and repairing..... | 86.63 | 32,526.52 | 2,906.95 | 107.75 |
| Maintenance and operation sewage pumping station..... | 401.00 | 15,973.43 | 151.25 | |

TABLE No. 11.—Average cost of materials and labor, per linear foot of pipe sewers, constructed by day labor; also average cost of basins.

[In this table it is assumed that the cost of materials used in basin construction is the same as that in the same size sewer. It is also assumed that on account of the difference in the depth of excavation the cost of labor is half the cost of that of the same size sewer. This table does not embrace the cost of work of exceptionally difficult construction.]

| Size of sewer. | Length. | Cost of materials. | Cost of labor. | Total cost. |
|-------------------------|--------------|--------------------|-----------------|-----------------|
| | <i>Feet.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Lin. ft.</i> |
| 8-inch..... | 949 | \$0.422 | \$1.343+ | \$1.765 |
| 10-inch..... | 12,657 | .498— | 1.262+ | 1.76 |
| 12-inch..... | 20,347 | .61 | 1.44 + | 2.05 |
| 15-inch..... | 5,118 | .752+ | 1.69 | 2.442 |
| 18-inch..... | 3,058 | .90 + | 1.906+ | 2.806 |
| 21-inch..... | 851 | 1.139 | 1.737+ | 2.876 |
| 24-inch..... | 517 | 1.504— | 3.648 | 5.252 |
| 10-inch connection..... | 1,098 | .498 | .631 | 1.129 |
| 12-inch connection..... | 3,055 | .61 | .72 | 1.33 |
| 15-inch connection..... | 198 | .752 | .845 | 1.59 |
| 18-inch connection..... | 131 | .90 | .953 | 1.853 |
| Catch-basins..... | 186 | 17.66 | 26.787 | 44.447 |

TABLE No. 12.—Conduits laid during fiscal year ended June 30, 1908. ^a

| No. of duct. | Washington Railway and Electric Co. ^b | | Capital Traction Co. | | Chesapeake and Potomac Telephone Co. | | Western Union Telegraph Co. | | Total. | |
|--------------|--|--------------|----------------------|--------------|--------------------------------------|--------------|-----------------------------|--------------|--------------|--------------|
| | Conduit. | Duct. | Conduit. | Duct. | Conduit. | Duct. | Conduit. | Duct. | Conduit. | Duct. |
| | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> |
| 1..... | 2,288 | 2,288 | ..... | ..... | 4,475 | 4,475 | ..... | ..... | 6,801 | 6,801 |
| 2..... | 222 | 444 | ..... | ..... | 28,726 | 57,452 | 102 | 204 | 29,050 | 58,100 |
| 3..... | ..... | ..... | ..... | ..... | ..... | ..... | 4,284 | 12,852 | 4,294 | 12,882 |
| 4..... | 36,338 | 145,352 | 23 | 92 | 13,020 | 52,080 | ..... | ..... | 49,381 | 197,524 |
| 5..... | ..... | ..... | ..... | ..... | ..... | ..... | 3,743 | 18,715 | 3,743 | 18,715 |
| 6..... | ..... | ..... | ..... | ..... | 3,532 | 21,192 | 3,334 | 20,004 | 6,866 | 41,196 |
| 8..... | 857 | 6,856 | ..... | ..... | 1,492 | 11,936 | ..... | ..... | 2,349 | 18,792 |
| 10..... | ..... | ..... | ..... | ..... | 5,217 | 52,170 | ..... | ..... | 5,217 | 52,170 |
| 12..... | ..... | ..... | ..... | ..... | 280 | 3,360 | ..... | ..... | 280 | 3,360 |
| 16..... | ..... | ..... | ..... | ..... | 309 | 4,944 | ..... | ..... | 309 | 4,944 |
| 18..... | ..... | ..... | ..... | ..... | 703 | 12,654 | ..... | ..... | 703 | 12,654 |
| 24..... | ..... | ..... | ..... | ..... | 198 | 4,752 | ..... | ..... | 198 | 4,752 |
| 70..... | ..... | ..... | ..... | ..... | 53 | 3,710 | ..... | ..... | 53 | 3,710 |
| Total. | 39,705 | 154,940 | 23 | 92 | 58,005 | 228,725 | 11,463 | 51,775 | 109,244 | 435,600 |

^a This table includes private conduit as follows: 38 feet by Chapin & Sacks Co., First and M streets NE., and 10 feet by T. B. Ferguson, 823 Fifteenth street NW.

^b The Brightwood Railway Co., United States Electric Lighting Co., Potomac Electric Light and Power Co., Anacostia and Potomac River Railway Co., Metropolitan Railway Co., and City and Suburban Railway Co. are included under the holding company, The Washington Railway and Electric Co.

Manholes:

| | |
|--|-----|
| Potomac Electric Power Co..... | 482 |
| Chesapeake & Potomac Telephone Co..... | 153 |
| Western Union Telegraph Co..... | 25 |
| Total..... | 860 |

Hand-holes:

| | |
|--------------------------------|----|
| Potomac Electric Power Co..... | 32 |
|--------------------------------|----|

TABLE NO. 13.—Gas mains laid during fiscal year ended June 30, 1908.

| Size of main. | Washing- ton Gas- light Co. | Georgo- town Gas- light Co. | Total. |
|----------------|-----------------------------------|-----------------------------------|--------|
| | Feet. | Feet. | Feet. |
| 1½ inches..... | 6,407 | 174 | 6,407 |
| 2 inches..... | 273 | ..... | 447 |
| 4 inches..... | 12,336 | 2,102 | 14,438 |
| 6 inches..... | 26,649 | 3,329 | 29,978 |
| 12 inches..... | 7,972 | 13,938 | 21,910 |
| 16 inches..... | ..... | 234 | 234 |
| 20 inches..... | 130 | ..... | 130 |
| 24 inches..... | 7,875 | ..... | 7,875 |
| Total..... | 61,642 | 19,777 | 81,619 |

TABLE NO. 14.—Summary of conduits laid to June 30, 1908.^a

| No. of duct. | Washington Rail- way and Elec- tric Co. ^b | | Capital Traction Co. | | Chesapeake and Potomac Tele- phone Co. | | Western Union Telegraph Co. | | Total. | |
|-----------------|--|-----------|-------------------------|---------|--|-----------|--------------------------------|--------|-----------|-----------|
| | Conduit. | Duct. | Conduit. | Duct. | Conduit. | Duct. | Conduit. | Duct. | Conduit. | Duct. |
| | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. |
| 1..... | 31,176 | 31,176 | ..... | ..... | 30,822 | 30,822 | 35 | 35 | 75,387 | 75,387 |
| 2..... | 131,214 | 262,428 | 15,742 | 31,484 | 164,592 | 329,184 | 1,178 | 2,356 | 310,080 | 626,160 |
| 3..... | 236 | 708 | ..... | ..... | 5,152 | 15,456 | 5,987 | 17,961 | 11,385 | 34,155 |
| 4..... | 254,041 | 1,016,164 | 13,496 | 53,984 | 125,505 | 502,020 | ..... | ..... | 395,826 | 1,668,304 |
| 5..... | ..... | ..... | ..... | ..... | ..... | ..... | 4,168 | 20,840 | 4,168 | 20,840 |
| 6..... | 40,578 | 243,468 | 7,320 | 43,920 | 77,455 | 464,730 | 4,232 | 25,392 | 129,585 | 777,510 |
| 7..... | ..... | ..... | 29 | 203 | ..... | ..... | ..... | ..... | 102 | 714 |
| 8..... | 69,854 | 558,832 | 2,761 | 22,088 | 45,308 | 362,464 | ..... | ..... | 117,923 | 943,384 |
| 9..... | 7,288 | 65,592 | ..... | ..... | 114 | 1,026 | ..... | ..... | 7,402 | 66,618 |
| 10..... | 8,363 | 83,630 | ..... | ..... | 15,948 | 159,480 | 183 | 1,830 | 24,494 | 244,940 |
| 12..... | 19,889 | 238,668 | ..... | ..... | 8,496 | 101,952 | ..... | ..... | 28,385 | 340,620 |
| 13..... | ..... | ..... | ..... | ..... | 212 | 2,756 | 309 | 4,017 | 521 | 6,773 |
| 14..... | 3,104 | 43,456 | 4,257 | 59,598 | 1,400 | 19,600 | ..... | ..... | 8,761 | 122,654 |
| 15..... | 68 | 1,020 | ..... | ..... | ..... | ..... | 44 | 660 | 112 | 1,680 |
| 16..... | 3,279 | 52,464 | ..... | ..... | 6,913 | 110,608 | ..... | ..... | 10,192 | 163,072 |
| 17..... | ..... | ..... | ..... | ..... | 636 | 10,812 | ..... | ..... | 636 | 10,812 |
| 18..... | 2,214 | 39,852 | ..... | ..... | 2,279 | 41,022 | ..... | ..... | 4,493 | 80,874 |
| 20..... | 464 | 9,280 | ..... | ..... | 1,407 | 28,140 | ..... | ..... | 1,871 | 37,420 |
| 22..... | 134 | 2,948 | 9,109 | 200,398 | 823 | 18,106 | ..... | ..... | 10,066 | 221,452 |
| 24..... | 2,711 | 65,064 | ..... | ..... | 2,270 | 54,480 | ..... | ..... | 4,981 | 119,544 |
| 25..... | ..... | ..... | ..... | ..... | 304 | 7,600 | ..... | ..... | 304 | 7,600 |
| 26..... | ..... | ..... | 280 | 7,280 | ..... | ..... | ..... | ..... | 280 | 7,280 |
| 28..... | 2,261 | 63,308 | ..... | ..... | ..... | ..... | ..... | ..... | 2,261 | 63,308 |
| 30..... | 53 | 1,590 | ..... | ..... | 313 | 9,390 | ..... | ..... | 366 | 10,990 |
| 32..... | ..... | ..... | ..... | ..... | 485 | 15,520 | ..... | ..... | 485 | 15,520 |
| 36..... | 3,854 | 138,744 | ..... | ..... | 26 | 936 | ..... | ..... | 3,880 | 139,680 |
| 38..... | 193 | 7,334 | ..... | ..... | ..... | ..... | ..... | ..... | 193 | 7,334 |
| 40..... | ..... | ..... | ..... | ..... | 1,589 | 63,560 | ..... | ..... | 1,589 | 63,560 |
| 44..... | 424 | 18,656 | ..... | ..... | ..... | ..... | ..... | ..... | 424 | 18,656 |
| 56..... | ..... | ..... | ..... | ..... | 749 | 41,944 | ..... | ..... | 749 | 41,944 |
| 58..... | 58 | 406 | ..... | ..... | ..... | ..... | ..... | ..... | 58 | 406 |
| 64..... | 106 | 6,784 | ..... | ..... | 176 | 11,264 | ..... | ..... | 282 | 18,048 |
| 70..... | ..... | ..... | ..... | ..... | 53 | 3,710 | ..... | ..... | 53 | 3,710 |
| 72..... | ..... | ..... | ..... | ..... | 118 | 8,496 | ..... | ..... | 118 | 8,496 |
| 82..... | ..... | ..... | ..... | ..... | 35 | 2,870 | ..... | ..... | 35 | 2,870 |
| Total..... | 581,562 | 2,951,572 | 52,994 | 418,955 | 493,180 | 2,417,948 | 16,136 | 73,091 | 1,160,447 | 5,972,305 |

^a This table includes 473 feet of conduit laid by private persons, 42 feet laid by Great Falls and Old Dominion Railway Co., 1,397 feet laid by United States Government, and 14,663 feet laid by Postal Telegraph Co.

^b The Brightwood Railway Co., United States Electric Lighting Co., Potomac Electric Light and Power Co., Anacostia and Potomac River Railway Co., Metropolitan Railway Co., and City and Suburban Railway Co. are included under the holding company, The Washington Railway and Electric Co.

TABLE NO. 15.—*Summary of gas mains laid to June 30, 1908, beginning with July 1, 1906.*

| Size of main. | Washington Gas Light Co. | Georgetown Gas Light Co. | Total. |
|---------------|--------------------------|--------------------------|--------------|
| | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> |
| 1½-inch..... | 6,407 | 3,120 | 9,527 |
| 2-inch..... | 273 | 174 | 447 |
| 4-inch..... | 17,713 | 7,432 | 25,145 |
| 6-inch..... | 52,512 | 3,329 | 55,841 |
| 12-inch..... | 13,337 | 13,938 | 27,275 |
| 16-inch..... | | 234 | 234 |
| 20-inch..... | 130 | | 130 |
| 24-inch..... | 7,875 | | 7,875 |
| Total..... | 98,247 | 28,227 | 126,474 |

REPORT OF THE INSPECTOR OF BUILDINGS.

WASHINGTON, September 4, 1908.

SIR: I have the honor to submit herewith the annual report covering the transactions of the building department for the fiscal year ending June 30, 1908, together with recommendations for the fiscal year ending June 30, 1909.

Statement of permits issued from July 1, 1907, to June 30, 1908.

| | Number. | Value. | | Number. | Value. |
|--|---------|-----------|--|---------|-----------|
| Brick additions and repairs..... | 1,414 | \$979,540 | Frame warehouses..... | 2 | \$5,300 |
| Brick dwellings..... | 625 | 2,973,940 | Frame club house..... | 1 | 2,000 |
| Brick store and dwellings..... | 22 | 128,725 | Frame laundry..... | 1 | 1,200 |
| Brick stores..... | 28 | 99,170 | Frame stables..... | 18 | 7,360 |
| Brick apartment houses..... | 33 | 643,500 | Frame greenhouses..... | 5 | 2,095 |
| Brick store and apartment houses..... | 2 | 25,000 | Frame carriage house..... | 1 | 1,700 |
| Brick hotel..... | 1 | 70,000 | Frame boat house..... | 1 | 9,000 |
| Brick church..... | 3 | 47,000 | Frame offices..... | 5 | 8,295 |
| Brick warehouses..... | 15 | 195,500 | Frame passenger stations..... | 2 | 10,050 |
| Brick stables..... | 41 | 69,610 | Frame grandstands..... | 3 | 5,860 |
| Brick laundry..... | 1 | 5,000 | Frame storehouses..... | 2 | 335 |
| Brick "administration building"..... | 1 | 225,000 | Frame dance pavilion..... | 1 | 50 |
| Brick bank..... | 1 | 10,000 | Frame sheds..... | 668 | 27,605 |
| Brick store, power and oil houses..... | 3 | 154,700 | Frame reviewing stand..... | 1 | 1,700 |
| Brick telephone exchange..... | 1 | 12,000 | Frame blacksmith shop..... | 1 | 200 |
| Brick garages..... | 16 | 22,275 | Frame workshop..... | 1 | 400 |
| Brick electric transformer..... | 1 | 6,500 | Elevators..... | 87 | 142,280 |
| Brick boiler house..... | 1 | 1,000 | Gas engines..... | 6 | 10,710 |
| Brick workshops..... | 2 | 5,000 | Motors..... | 204 | 53,062 |
| Brick sheds..... | 16 | 5,410 | Engines and boilers..... | 15 | 16,470 |
| Brick blacksmith shops..... | 2 | 525 | Heating apparatus..... | 12 | 7,266 |
| Brick factory..... | 1 | 15,000 | Machinery..... | 22 | 333,825 |
| Brick school..... | 1 | 190,000 | Ovens..... | 2 | 3,300 |
| Brick gas holder..... | 1 | 230,000 | Gasoline engine..... | 1 | 150 |
| Brick hospital..... | 1 | 20,000 | Dynamo..... | 1 | 250 |
| Brick carriage house and garage..... | 1 | 15,000 | Dumb-waiters..... | 11 | 1,000 |
| Brick oil house..... | 1 | 250 | Total..... | 4,983 | 8,652,457 |
| Brick offices..... | 3 | 2,900 | Minor repairs..... | 2,784 | 27,840 |
| Brick hall..... | 1 | 2,500 | Signs..... | 538 | 5,380 |
| Concrete dwelling..... | 1 | 700 | Awnings..... | 156 | 11,700 |
| Iron shear and scale house..... | 1 | 300 | Fire escapes..... | 71 | 14,200 |
| Iron sheds..... | 6 | 4,730 | Total..... | 8,532 | 8,711,577 |
| Frame additions and repairs..... | 1,055 | 136,222 | District of Columbia government buildings..... | 15 | 441,826 |
| Frame dwellings..... | 599 | 1,688,897 | Grand total..... | 8,547 | 9,153,403 |
| Frame stores..... | 4 | 4,300 | | | |
| Frame store and dwellings..... | 2 | 7,500 | | | |
| Frame churches..... | 2 | 3,300 | | | |

Comparative statement for the years 1907 and 1908.

| | New build- ings. | Re- pairs. | Dwell- ings. | Apart- ments. | Business buildings. |
|-----------|------------------------|---------------|-----------------|------------------|------------------------|
| 1908..... | 1,429 | 2,469 | 1,224 | 33 | 135 |
| 1907..... | 1,684 | 2,484 | 1,251 | 26 | 177 |
| | a 255 | a 15 | a 27 | 7 | a 42 |

a Decrease.

Valuation of building operations not including government work:

| | |
|---------------|-------------|
| 1908..... | \$8,711,577 |
| 1907..... | 12,714,472 |
| Decrease..... | 4,002,895 |

Permits issued, including buildings, repairs, minor repairs, awnings, engines, boilers, motors, signs, heating apparatus, etc.:

| | |
|---|-------|
| 1908..... | 8,897 |
| 1907..... | 9,862 |
| Decrease..... | 965 |
| Projections beyond the building line applied for..... | 974 |

The following summary will show the distribution of improvements in the different sections of the District and the values of same:

| Section. | Buildings. | Repairs. |
|----------------|-------------|-------------|
| Northwest..... | \$1,809,954 | \$1,035,014 |
| Southwest..... | 330,573 | 107,406 |
| Northeast..... | 463,638 | 53,380 |
| Southeast..... | 256,144 | 59,016 |
| County..... | 4,118,031 | 419,301 |
| Total..... | 6,978,340 | 1,674,117 |

Estimated number of buildings in the District of Columbia.

| | Brick buildings. | Frame buildings. |
|----------------------|---------------------|---------------------|
| 1907..... | 50,332 | 22,268 |
| Erected in 1908..... | 864 | 526 |
| Total..... | 51,196 | 22,794 |

Municipal buildings erected under the supervision of this office, exclusive of the cost of site:

| | |
|---|----------|
| Addition to Eastern Market, Seventh street and North Carolina avenue SE..... | \$23,298 |
| Chemical engine house, Twenty-second street, between Franklin and Everts streets NE (Langdon, D. C.)..... | 16,400 |
| John H. Ketcham School, No. 149, Adams, Jackson, and Harrison streets SE. (Anacostia, D. C.)..... | 42,500 |
| John P. Van Ness School, No. 150, Fourth and M streets SE..... | 45,650 |
| Six-room school No. 108, Twentieth street and Queens Chapel road NE. (Langdon, D. C.)..... | 22,993 |
| Four-room school No. 131, Philadelphia street, between Eighth and Ninth streets NW. (Petworth)..... | 23,687 |
| Four-room school, N. P. Gage, No. 143, Second and Elm streets NW..... | 20,683 |
| Four-room school, Matthew G. Emery, No. 133, Lincoln avenue and Prospect street NW..... | 21,533 |
| Four-room school, No. 151, Ninth and Ingraham streets NW. (Brightwood)..... | 26,316 |
| Four-room school, No. 152, Whittingham and Lane place NE. (Deanwood)..... | 26,384 |
| Chemical engine house, Minnesota avenue, between Hunt place and Sherwood avenue NE. (Benning, D. C.)..... | 15,939 |
| Municipal crematorium, reservation No. 13, Twenty-first and B streets SE..... | 14,561 |
| Extension to the McKinley Manual Training School, Seventh street and Rhode Island avenue NW..... | 108,340 |
| Cement storehouse, Fourteenth and D streets SW..... | 7,995 |
| Truck and engine house, Lanier place, between Ontario and Adams Mill roads. NW..... | 23,547 |
| Total..... | 441,826 |

| | |
|---|---------|
| Receipts of the office for the past year: | |
| For building permits and repairs..... | \$5,522 |
| For projections..... | 974 |
| For engines, boilers, heating apparatus, motors, etc..... | 372 |
| For awnings..... | 156 |
| For signs..... | 538 |
| For fire escapes..... | 71 |
| Total..... | 7,633 |
| Total for 1907..... | 8,084 |
| Decrease..... | 451 |

Description and cubic cost of municipal buildings.

| Name and location. | Cost. | Cubical contents. | Cost per cubic foot. | Description. | Architect. |
|---|----------|-------------------|----------------------|------------------------|-------------------------|
| | | <i>Feet.</i> | <i>Cents.</i> | | |
| Addition to the Eastern Market, Seventh street and North Carolina avenue se. | \$23,298 | 226,522 | 10.2 | Brick..... | Inspector of buildings. |
| Chemical enginehouse, Twenty-second street, between Franklin and Everts streets ne. (Langdon, D. C.). | 16,400 | 102,592 | 15.9 | Brick and pebble dash. | Mullett & Co. |
| John H. Ketcham School, No. 149, Adams, Jackson, and Harrison streets (Anacostia). | 42,500 | 385,919 | 11 | Brick..... | Inspector of buildings. |
| John P. Van Ness School, No. 150, Fourth and M streets se. | 45,650 | 322,758 | 14.1 |do..... | Harding & Upman. |
| Six-room school, No. 108, Twentieth street and Queens Chapel road ne. (Langdon, D. C.). | 22,993 | 177,235 | 12.9 | Frame..... | Inspector of buildings. |
| Four-room school, No. 131, Philadelphia street, between Eighth and Ninth streets nw. (Petworth). | 23,687 | 147,390 | 16 | Brick..... | Do. |
| Four-room school, N. P. Gage, No. 143, Second and Elm streets nw. | 20,683 | 140,390 | 14.7 |do..... | Do. |
| Four-room school, Matthew G. Emery, No. 133, Lincoln avenue and Prospect street ne. | 21,533 | 146,200 | 14.7 |do..... | Do. |
| Four-room school, No. 151, Ninth and Ingraham streets nw. (Brightwood). | 26,316 | 290,994 | 9 | Brick and pebble dash. | Do. |
| Four-room school, No. 152, Whittingham and Lane place ne. (Deanwood). | 26,384 | 290,994 | 9 |do..... | Do. |
| Chemical engine house, Minnesota avenue between Hunt place and Sherwood avenue ne. (Benning). | 15,939 | 94,412 | 16.8 | Brick..... | Leon E. Dessez. |
| Municipal Crematorium, reservation 13, Twenty-first and B streets se. | 14,561 | 121,434 | 11.9 | Frame and pebble dash. | W. L. Webster. |
| Extension to McKinley Manual Training School, Seventh street and Rhode Island avenue nw. | 108,340 | 419,199 | 26 | Fireproof..... | L. Norris. |
| Cement storehouse, Fourteenth and D streets sw. | 7,995 | 85,000 | 9.4 | Brick and pebble dash. | Inspector of buildings. |
| Truck and engine house, Lanier place, between Ontario and Adams Mill roads nw. | 23,547 | 158,056 | 14.8 |do..... | A. P. Clarke, jr. |

The following buildings were erected during the past year, but not under the supervision of this office:

| | |
|-------------------------------------|---------|
| Bathing beach..... | \$8,938 |
| Tuberculosis hospital..... | 86,552 |
| Stable, Industrial Home School..... | 1,297 |
| Stable, water department..... | 21,300 |
| Total..... | 118,087 |

The following buildings are in the course of erection or preparation:

Sixteen-room school building, No. 153, at Fourth and W streets NW., 60 per cent completed.

Sixteen-room school building, No. 154, Seventeenth and Euclid streets NW., 70 per cent completed.

Twelve-room school building, No. 155, B street, between Thirteenth and Fourteenth streets SE., 55 per cent completed.

Administration building, workhouse for males, reservation No. 13, bids for construction under consideration.

Plans for truck house, southwest, will be completed latter part of September, 1908.

The four-room additions to the Petworth, the Gage, and the Emery schools and the six-room addition to the Langdon School will be ready for occupancy for the coming school term, and the four-room buildings at Deanwood and Brightwood and the eight-room building to relieve the McCormick will be ready for school this fall. The eight-room building at Anacostia has already been occupied for school purposes. The fireproof addition to the McKinley Manual Training School, with the exception of the equipment, is completed and available. The cement storehouse is occupied and the addition to the Eastern Market is now being fitted up with stalls and refrigerators and will be ready for market purposes the latter part of September. The engine houses at Hillbrook, Langdon, and Lanier Heights have been completed, and as soon as the electrical equipment is installed at Langdon and Lanier Heights these buildings will be ready for service. The crematorium has been completed for some time, but lately improvements have been made in the smoke-consuming furnaces and the building is now available for the purposes for which it was erected.

The sixteen-room school No. 153 will not be completed until the early spring. The sixteen-room school No. 154 will be ready for school purposes at the beginning of the new year. The twelve-room school, No. 155, should be completed in February, 1909.

The engine house at Hillbrook has been occupied and the engine houses at Langdon and Lanier Heights will probably be occupied about October 1.

The completion of the above-mentioned schools makes 40 class rooms available for school purposes this fall, and 44 additional class rooms will be available about the Easter holidays. Thirteen portable school houses will be completed about October 1. These will increase the number of rooms available for school purposes this fall to 53, which will accommodate over 2,500 pupils.

ASSISTANT INSPECTORS.

I would respectfully invite attention to the fact that during the year about 4,983 buildings have been erected or altered under permit, and that the 8 assistant inspectors have made 52,953 visits to these buildings, or about 12 visits to each piece of work. Notwithstanding that this is more than 20 inspections a day for each man, it will be seen that the number of visits to each building is insufficient to keep in close touch with the work or give it anything like a supervisory care. Yet even 20 inspections are too many for one man to make each day. It therefore appears that the present force is inadequate, and to give the service which seems to be expected it should be so increased that each building could be visited at least 24 times instead of 12, and that each man should make 10 thorough daily inspections instead of 20 hasty and unsatisfactory calls at each piece of work. I beg of you to remember that besides the time consumed in inspections these men must have some time to submit their reports, write up their notices, and receive their orders. They submit to me a total of 180 reports each day. I believe that I can safely say, after comparison with similar duties in other cities, that our men cover more ground and do more work for less pay and with no means of transportation furnished.

I trust it may be made clear that with the present force we can not thoroughly comply with requirements and perform a perfect service. At least 100 serious accidents have been avoided through their efforts and several hundred violations of regulations have been discovered, and in nearly 50 cases the offenders punished. But with only 8 men I can not hope to prevent all accidents, when several weeks must elapse between visits to buildings. The efficiency of the service would be on the safe side if we had 18 inspectors instead of 8. Having shown the amount of arduous daily work of each inspector and the responsible character of his work, I would earnestly recommend an increase in the salaries of inspectors. Please remember that these men share the dangers of a fireman and take similar risks tenfold oftener than he does, besides being held responsible for accidents. They are also the heads and sole support of families, and, not like some of the school-teachers, only one contributing member of the family. I can not afford to give the inspectors more than fourteen days' leave in a year, while other branches get twenty and thirty days and the teachers three months. In considering the estimate I hope they will be remembered.

One man, a temporary inspector, is employed and needed for house numbering and minor matters, such as dangerous cellar doors, defective downspouts, improper use of frame sheds, signs, awnings, and numerous complaints.

INSPECTORS OF ELEVATORS.

Two inspectors are detailed on elevators, and their report shows the enormous amount of work necessary to keep up to the requirements.

FIRE-ESCAPE LAW.

This year the new law relating to fire escapes would require the entire time of one inspector, as it virtually means a house-to-house inspection of all buildings but private residences, which means that about one-sixth of all the 70,000 buildings, or nearly 12,000, must be examined to ascertain whether they come within the law. An inspector has been employed under the appropriation for that purpose and assigned to the inspection of hotels and theaters, in order to carry out the fire-escape law as far as such buildings are concerned. At the present rate, with only one man for such work, it will take about four years or more to cover the buildings within the scope of the law.

INSPECTION OF HEATING APPARATUS.

There should be some one expert in heating apparatus to take the work off the elevator inspectors. The board of underwriters have strongly recommended such an appointment, which should save many houses from fire and prevent loss of life. Besides such duties, he would save his salary to the District in supervising the installation of heating and ventilating apparatus in 150 schools and 50 other buildings of the city government. I would invite attention to the method approved by Congress for supervising this class of work on government buildings, or at the Capitol building.

In order not to increase the appropriation for this department to a noticeable extent and restrict any recommendations to the lowest workable basis, I would say that the most urgent help and the most important position needed is that of a heating and sanitary engineer. The District now has over 200 buildings connected with the city government, which contain expensive heating and ventilating plants, which should have the supervision of such an official. During the past year I have been compelled to employ engineers for such work on a percentage basis, and the combined cost on the buildings would pay a good salary and give us the undivided and continual services of an expert on this very important branch of the work. In most every case where complicated heating and ventilation plants have been installed I have been compelled to modify them to suit the conditions under which they are used and the manner of handling them. An engineer who has not made a study of the heating plants for schools can not design a school plant that will give satisfactory service, and consequently I have modified the work at a greater cost than it would have required if properly designed and installed in the first place. Besides, the superintendent of repairs is in daily need of such advice in repairing and maintaining the heating and ventilation apparatus of the schools, hospitals, police stations, engine houses, industrial schools, reformatories, etc., which come under his care. Several years ago the need of such an expert was recognized by the introduction of a bill in Congress to pay an engineer \$3,000 per annum to look after the design of such plants, but the services of such a man are needed constantly, not only to see that the plants are properly designed, but that they are properly installed and maintained. I know that no well-regulated corporation or business concern would for an instant think of intrusting a million dollars' worth of machinery to unskilled and inexperienced employees, and the present employees could not give the necessary time from present duties, even if they were experienced or qualified to care for the heating and ventilation of other city government buildings.

CHANGE IN OFFICE FORCE AND INCREASE IN SALARY.

During the last three years this office has lost the services of one-third of its inspection force by requests from Federal and local departments for their services through assignment or furlough. By inducements of higher salaries for the same class of work as they rendered in this office we have been compelled to relinquish men for services in other departments and private work. I would earnestly recommend that the salaries of three of the inspectors be raised to \$1,400 as an inducement to remain in the district service, and some means of promotion in case of satisfactory records.

INSPECTION OF THEATERS AND HALLS.

The records and reports of this office show that every year before the opening of the theaters, and again when the licenses are applied for in October, a thorough inspection and report are made of the condition of all theaters, halls, and places of amusement, and such buildings in this city have always been kept within the regulations, and while several of the buildings are older than the regulations, they conform as nearly as possible without rebuilding. We have now four fireproof theaters, but the other older buildings, with one exception, are more safely provided with ample exits than will be found in any other city. The seats in one of the theaters are uncomfortable and unsafely close. In another the stairways from the balcony discharge the balcony patrons at right angles to the audience from the main floor; otherwise the exits are excellent.

The committee for revision of the regulations has submitted a very comprehensive draft of regulations for theaters, halls, moving-picture places, and other auditoriums or places of amusement.

VENTILATION OF THEATERS.

There is a very important matter which seems to have been overlooked, and that is that the theaters are inadequately provided with means of ventilation or supply of fresh air at proper temperatures.

ARCHITECTS' AND BUILDERS' LICENSES.

I beg to renew my recommendations of last year, which are in keeping with the expressed opinion of the former inspector of buildings, that some board or committee should be constituted to pass on the qualifications of persons claiming to be architects or builders, and limiting or restricting the responsibility of this character of work to architects or builders of established reputation or evident qualifications.

During the past year I have from time to time called the attention of the Commissioners to the present state of affairs, which makes it possible for the builder or architect, who is directly and professedly responsible, to evade the consequences attributable to his ignorance or carelessness and subject innocent owners to the penalty prescribed by the regulations and damages imposed by law. I am more firmly convinced than ever that great risks are taken by many persons in this city who engage in building work with the acknowledged intention of evading the regulations whenever possible.

In addition to my recommendations I beg to state that I have received and filed a report of a committee, submitted to the president of the Borough of Manhattan last April, on the many disasters in New York due to the carelessness or dishonesty of unprincipled builders, and recommending that architects and builders be licensed or registered in such a way as to hold them responsible to the authorities for their acts or neglect and to reinforce and fortify the work of the inspector of buildings.

I attended very carefully the hearings on this subject before the Board of Commissioners and can not recall a single argument in opposition to the adoption of some fair and reasonable law to make the builders responsible and to make the risk of doing dishonest or shoddy work too great and punishment too severe in the eyes of the builders.

ELEVATORS.

I beg to invite attention to the annexed reports of the inspectors of elevators, which show that notwithstanding the inroads on their time for miscellaneous inspections they made 2,070 inspections, including government buildings when requested, or about on an average of 8 inspections each working day for the two inspectors. But three serious accidents have occurred, and these were not the result of breakage in the machinery or hoisting apparatus. Carelessness in operation and neglect in the maintenance will not be corrected until the engineers and operators are under official control or licensed, as recommended by the elevator inspectors. The cleanliness of the machines and proper lubrications of them and the hoisting cables are the safeguards of life and limb and saving of money. The regulations require daily inspections by the engineer or operator, but under present conditions I can not enforce general compliance. The committee for review of the regulations have under consideration the revision of the elevator regulations; but on account of the danger in the use of freight compartments attached to passenger elevators the inspector of buildings, with the advice of the engineering committee, has forwarded recommendations to amend the regulations in this respect at once. The committee for revision

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During the last three years this office has lost the services of one-third of its inspection force by requests from Federal and local departments for their services through assignment or furlough. By inducements of higher salaries for the same class of work as they rendered in this office we have been compelled to relinquish men for services in other departments and private work. I would earnestly recommend that the salaries of three of the inspectors be raised to \$1,400 as an inducement to remain in the district service, and some means of promotion in case of satisfactory records.

INSPECTION OF THEATERS AND HALLS.

The records and reports of this office show that every year before the opening of the theaters, and again when the licenses are applied for in October, a thorough inspection and report are made of the condition of all theaters, halls, and places of amusement, and such buildings in this city have always been kept within the regulations, and while several of the buildings are older than the regulations, they conform as nearly as possible without rebuilding. We have now four fireproof theaters, but the other older buildings, with one exception, are more safely provided with ample exits than will be found in any other city. The seats in one of the theaters are uncomfortable and unsafely close. In another the stairways from the balcony discharge the balcony patrons at right angles to the audience from the main floor; otherwise the exits are excellent.

The committee for revision of the regulations has submitted a very comprehensive draft of regulations for theaters, halls, moving-picture places, and other auditoriums or places of amusement.

VENTILATION OF THEATERS.

There is a very important matter which seems to have been overlooked, and that is that the theaters are inadequately provided with means of ventilation or supply of fresh air at proper temperatures.

ARCHITECTS' AND BUILDERS' LICENSES.

I beg to renew my recommendations of last year, which are in keeping with the expressed opinion of the former inspector of buildings, that some board or committee should be constituted to pass on the qualifications of persons claiming to be architects or builders, and limiting or restricting the responsibility of this character of work to architects or builders of established reputation or evident qualifications.

During the past year I have from time to time called the attention of the Commissioners to the present state of affairs, which makes it possible for the builder or architect, who is directly and professedly responsible, to evade the consequences attributable to his ignorance or carelessness and subject innocent owners to the penalty prescribed by the regulations and damages imposed by law. I am more firmly convinced than ever that great risks are taken by many persons in this city who engage in building work with the acknowledged intention of evading the regulations whenever possible.

In addition to my recommendations I beg to state that I have received and filed a report of a committee, submitted to the president of the Borough of Manhattan last April, on the many disasters in New York due to the carelessness or dishonesty of unprincipled builders, and recommending that architects and builders be licensed or registered in such a way as to hold them responsible to the authorities for their acts or neglect and to reinforce and fortify the work of the inspector of buildings.

I attended very carefully the hearings on this subject before the Board of Commissioners and can not recall a single argument in opposition to the adoption of some fair and reasonable law to make the builders responsible and to make the risk of doing dishonest or shoddy work too great and punishment too severe in the eyes of the builders.

ELEVATORS.

I beg to invite attention to the annexed reports of the inspectors of elevators, which show that notwithstanding the inroads on their time for miscellaneous inspections they made 2,070 inspections, including government buildings when requested, or about on an average of 8 inspections each working day for the two inspectors. But three serious accidents have occurred, and these were not the result of breakage in the machinery or hoisting apparatus. Carelessness in operation and neglect in the maintenance will not be corrected until the engineers and operators are under official control or licensed, as recommended by the elevator inspectors. The cleanliness of the machines and proper lubrications of them and the hoisting cables are the safeguards of life and limb and saving of money. The regulations require daily inspections by the engineer or operator, but under present conditions I can not enforce general compliance. The committee for review of the regulations have under consideration the revision of the elevator regulations; but on account of the danger in the use of freight compartments attached to passenger elevators the inspector of buildings, with the advice of the engineering committee, has forwarded recommendations to amend the regulations in this respect at once. The committee for revision

of regulations has submitted new regulations for elevators after long and careful comparison with the rules of other cities and consultation with the engineers of elevator companies.

REVIEW OF REGULATIONS.

The committee appointed by the Commissioners to review the regulations has made some changes in the technical definitions; has drawn up a bill to reorganize the office of inspector of buildings and connect the other offices which deal with buildings in any way and make all work in systematic and businesslike harmony; to provide a more direct law for the removal of dangerous buildings; to amend the law for height of buildings; to give proper credit for fireproof buildings; to provide a just and reasonable fee for permits, in accordance with the size and importance of the building to be erected or altered; to provide proper light and ventilation for buildings and prevent overcrowding the lots; to provide for safer use of flat floor slabs of terra cotta or concrete; to regulate theaters, halls, etc.; to improve the elevator regulations; to divide suites in buildings by brick instead of stud partitions; to regulate the use of concrete and provide for safe forms and centering; and all regulations of other cities have been carefully compared.

HEIGHT OF BUILDINGS.

I beg to call attention to the practical results of the amendments made year before last to the law relating to the height of buildings. The law as originally drafted placed the limit of height on residence streets for fireproof buildings at 90 feet, but Congress reduced the height to 80 feet for fireproof buildings and left the height for combustible buildings at 60 feet. The former height will not allow more than 7 stories in fireproof construction, while the latter height will admit of 5 stories in combustible construction. Consequently a type of building has resulted consisting of brick outer walls only, with an enormous area subdivided by stud and lath partitions only and no interior walls. I would therefore recommend that Congress be petitioned to allow 93 feet for fireproof buildings on residence streets or reduce the height of combustible buildings to 50 feet. The committee recommends some change of this kind.

ESTIMATES FOR DISTRICT BUILDINGS.

I beg to strongly advise against the practice which has sprung up in recent years in some of the departments in making their own estimates for cost of buildings, instead of setting forth the needs and description of the buildings in detail and leaving the cost to be determined by this department after proper consideration of all circumstances. It has resulted in lowering the standard of work during the past year and enforcing a reduction in the size and character of some of the buildings to keep within the appropriations. In most cases the departments make known their wants after the amount is fixed. It seems only necessary to invite attention to the manner of appropriating for our school buildings. The appropriation is given as \$60,000 for an 8-room building and site. This appropriation is not available until the July following, and by the time the site is acquired and plans for the building finished we are in the winter weather; and the worst feature of the combined appropriation for "building and site" is that on the banks of the canal or remote sections of the city a site may be had for a few thousand dollars, while in the built up and improved part of the city a much too small site will take one-third of the entire appropriation. The result is that the remote and squalid section of the city gets a fine building and fair size site while the improved section must be content with a brick factory looking building on a smaller site. I would recommend that all requests for sites be pooled, and a lump sum asked to acquire all the sites one year in advance of the appropriation for the buildings, and that all sites be advertised for or acquired at one time. In this way real-estate brokers and others would not be able to ascertain what proportion of the lump appropriation would be allowed for the several sites. As it is now, they always leave an insufficient amount for the buildings. The site might be easily enlarged after the building is up, but the character and design of the buildings can not be changed without great expense.

INCREASE IN APPROPRIATIONS.

I would also invite attention to the increased cost of the buildings in late years. Our buildings are not of fireproof construction and cost about one-half the amount of the Boston schools. Our 8-class-room schools, with 4 basement rooms, making 12 rooms in all, are now estimated to cost \$50,000, and I believe they could be fire-

proofed up to the ceiling or roof for \$70,000. The 8-room school is the most compact in plan and economical in operation of any building yet designed. A 16-room school will cost more than twice as much to build and will cost more proportionately to heat and repair. If such buildings are desired, they will cost \$150,000. I regret to say that the appropriations for the 12 and 16 room schools in the 1908 act will not admit of fireproof construction, and as so much has been expended for sites, the buildings must be as plain as possible.

RECOMMENDATIONS TO DEFINE THE DUTIES AND PLACE THE RESPONSIBILITY OF SEPARATE OFFICES.

I beg to call attention to several laws and regulations relating to public safety. Such laws necessarily require the unbiased and individual action of the officers named, and when the duties cover the same work the opinions may differ, which results in a deadlock of indefinite delay, and sometimes in conflicting orders from the several departments. I have in past reports requested that the duties or assignments be so defined that there will be no overlapping or duplication of work and that responsibility may be undivided and directly placed. With this object in view I submitted nearly three years ago a draft of amendment to the fire-escape law wherein the duties of the inspector of buildings and the fire chief and the electrical engineer were defined, and I am still of the opinion that such duties, unless defined in the law, would be held by the courts to apply severally and collectively, notwithstanding assignments or division of duties for administrative purposes or convenience. I would therefore request that the corporation counsel review the proposed bill, with the object of dividing the work, and I would recommend in all cases of regulation, such as theater inspections, that our respective duties be defined, or that all orders be issued from one office after reports from the others. I would also request an opinion of the corporation counsel as to the present understanding concerning inspection of electric wiring and electric power machinery and mechanical electric alarm gongs since the passage of the act to regulate electric wiring in the District of Columbia, approved April 26, 1904. I concur in the recommendation of the committee which investigated the District departments, as expressed in paragraph (p. 96) of their report.

REMOVAL OF DANGEROUS BUILDINGS.

The present law relating to unsafe buildings should be amended by defining the duties of the jury or committee of survey or condemnation, and badly needs a provision for penalty where the owner refuses to comply with the notice of condemnation, as I find a growing tendency to neglect the work and allow the inspector of buildings to do it and assess the cost. I fear we have been too economical in such work. If we made it more expensive the owner would prefer to do it. The law should make clear how the members of the jury are to be paid by the owner when adverse report is rendered, and when by the District, as all owners will appeal if the District pays the jury in any event.

HOUSE NUMBERING.

I would invite attention to the difficulty under present conditions of assigning more than temporary house numbers outside of Florida avenue in the subdivisions where the streets do not conform to either the prolongation of city streets of the highway extension plans, and I would recommend the approval of the regulations given in report of 1904.

The men in the office have worked earnestly and conscientiously with realization of the responsibilities placed upon them, and the clerical force give their services after the usual office hours in order to keep up the clerical work from day to day, and, notwithstanding these efforts, the work is slightly behind, with little prospect of completion before the winter months, when the building business is not so brisk. The clerical services required are of such a nature that I deem it but just to recommend in the estimates for the fiscal year of 1909 that their salaries be appropriately adjusted, and commend them to your consideration.

I have the honor to append the reports of the computers, assistant inspectors, the assistant inspectors of elevators and fire escapes, inspector of steam boilers and board of examiners for steam engineers, and the superintendent of repairs.

Very respectfully,

S. ASHFORD,
Inspector of Buildings.

Capt. WM. KELLY,
*Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.*

COMPUTERS' REPORT.

WASHINGTON, D. C., July, 1908.

SIR: We have the honor to submit annual report for fiscal year ending June 30, 1908, as follows:

We have handled a volume of detail work with all the minutia connected therewith far in excess of any previous year since the creation of the computing arm of your department, as the buildings of the city are of a higher character, both esthetically and structurally, year by year. So the necessity exists, and has existed, during the last twelve months to a marked degree for the most careful and thorough analysis of the many complex problems brought before us for consideration.

However carefully the architect or engineer may have surveyed a building site or examined into the structural conditions of an existing building, or however carefully he may have prepared his drawings and specifications and however great his attention to details may have been, structural conditions may develop that have been entirely unforeseen, and his foundation system may prove itself on the site of the building to be utterly and deplorably inadequate. To settle these questions is beyond the scope or ability of the field inspector. It is our duty to treat these cases with a careful analysis of the situation and to pass upon the many solutions offered to us with careful and conservative judgment.

Our duties are manifold and start with:

First. Approval or disapproval of the drawings and specifications of all buildings proposed to be erected in the city. We have instances of having to turn down drawings and specifications eight times before we could accept them.

We attribute the lack of properly detailed drawings and specifications as submitted to the department to three distinct causes, as follows:

(a) A desire to evade payment for skilled professional services in the preparation of plans and specifications.

(b) Through a deliberate desire to evade the building regulations and the laws of sound construction.

(c) Through dense and deplorable ignorance of the laws of construction.

It will thus be seen that much valuable time is lost through the reconciliation of any one or a combination of two or more of these causes.

Second. The approval or disapproval of complex and variable foundations. We have instances of having to turn down drawings and specifications five and six times.

Third. The approval or disapproval of individual building materials of every known class or character.

Under this classification we have made the following tests:

(a) Brick (clay): Absorption, crushing, freezing, heat.

(b) Brick (cement): Absorption, crushing, freezing, heat.

(c) Terra cotta: Crushing, heat, expansion.

(d) Concrete (stone or gravel aggregate): Crushing, adhesion, or frictional resistance.

(e) Iron: Tension, bending, corrosion.

(f) Steel: Tension, bending, welding, shear, corrosion.

(g) Copper: Tension, heat.

(h) Brass: Heat.

Fourth. The approval or disapproval of building materials in combination.

Under this classification we have the following tests:

(a) Steel, concrete (stone or gravel aggregate), and terra cotta: Bending.

(b) Steel and concrete (stone or gravel aggregate): Bending, heat.

(c) Steel and concrete (cinder aggregate): Bending, heat.

Fifth. The approval or disapproval of structural features connected with buildings owned by private parties and rented by the United States Government.

In this connection we can but condemn the indiscriminate rental, use, and occupancy of buildings for purposes other than those for which they have been designed and erected.

We have averaged one inspection every two weeks during the entire year on the class of government buildings mentioned. These inspections in the majority of cases have called for the most careful consideration and a thorough and complete mathematical analysis of all the conditions prevailing. Many of the inspections require a careful examination and report on the entire structure, while others cover a portion of the building only, or some detail connected therewith. As, for example, overloaded floors, girders, and columns, the installation of heavy safes, the impact of machinery on floor construction, vibration due to the action of machinery on floors, vibration due to the action of machinery on brick walls, the settlement of brick walls, spalling due to the action of fire on brick walls and stress on concrete arches due to overloading. All of these examinations have received the most careful and

thorough consideration, although often made under extreme pressure due to the limited time available from our regular duties.

We desire particularly to call your earnest attention to sections "Third" and "Fourth" of this report and the several subsections thereunder relating to the "approval or disapproval" of structural materials. It is a matter of the utmost necessity that these tests be made in the interests of the public safety, but it costs money to make them, and that cost has been borne personally by your computers for over five years, with such meager aid as they could obtain from outside parties; the time has now arrived when an annual appropriation for the prosecution and enlargement of such test operations has become a public necessity.

IN CONCLUSION.

In calling attention to the wide range of duties we are called upon to perform, and the technical ability and training required, we ask a comparison of the salaries paid men in other cities who are performing like duties with ours, they being paid in many instances from 30 to 60 per cent greater salaries than we receive.

We therefore respectfully request that our salaries be increased from \$1,500 to \$2,500 each.

Very respectfully,

C. W. SOMMERVILLE,
JOHN P. HEALY,
Computers.

The INSPECTOR OF BUILDINGS.

ASSISTANT INSPECTORS' REPORT.

SIR: We have the honor to submit a statement of official duties as assistant inspectors of buildings during the fiscal year ending June 30, 1908.

| | |
|---|--------|
| Visits to new buildings..... | 31,459 |
| Visits to old buildings..... | 11,268 |
| Visits of a miscellaneous character..... | 10,226 |
| Total..... | 52,953 |
| Condemnation of buildings or parts thereof..... | 864 |
| Buildings taken down..... | 33 |
| Buildings renumbered..... | 250 |
| Police court cases..... | 11 |
| Defective gutters and down spouts..... | 301 |

In accordance with the foregoing report the duties of the field inspectors, eight in number, traverse an area of 64 square miles, one-eighth of which is allotted each man. With the work in operation so distributed as to require supervision in all parts of each district daily, an average is made from one-half to three-fourths of the entire territory. Under these conditions, figuring pro rata the work of your assistants for the past fiscal year shows an aggregate of 21 examinations of buildings each day, which, if we allow a fair average of five and one-half hours outside of office, limits our time to fifteen and a fraction minutes for inspection of work, including time consumed in reaching next building.

As a matter of fact, police court cases and work of a miscellaneous character have tended somewhat to reduce this average.

In our opinion very unsatisfactory results are attained by prosecution in the police court for violations of the building regulations. The greater percentage of cases presented by your inspectors were either dismissed or personal bonds taken, and when fines were imposed the amount was inadequate as a caution against a repetition of the offense. Besides, we have often felt embarrassed through the failure of those connected with the court to properly notify or prepare us for cases called, and in no case have we been advised or counseled in law or necessary testimony to support our case. In lieu of prosecution in court we would recommend a stringent enforcement of the regulations in regard to the revocation of permits in all instances where violations occur.

We would respectfully renew the recommendations made in yearly reports since 1902 regarding the licensing of builders. In many cases we find the different details

of the work on buildings have been let to subcontractors, who are interested only in pushing their particular branch of the construction, and when defective work is discovered and pointed out there is a general tendency to shirk or shift the responsibility, which finally must be placed upon the owner, who as a rule has not the technical knowledge to satisfactorily pass upon the questions involved. This at times has caused unnecessary friction and delay. We believe these conditions could be corrected to a great extent by a law requiring the owner or builder to employ a superintendent or representative competent to supervise the work as a whole, and who should be present at all times during the construction of the building.

To avoid any delay to builders and in our endeavors to keep our work up to date we have at times found it necessary to work before and after official time.

Much time is at present taken up with work of a miscellaneous character, such as the examination of leaky down spouts, defective eaves gutters, conversion of wooden sheds to stables, and other matters which do not involve any structural question, but which, however, must be investigated and reported upon.

As an additional means of making inspections more effectual we would strongly recommend an increase of men in the field force, in order that we may devote more time on the work in course of construction. With an increased force in the field more frequent inspection could be made and more time devoted to each building, which would result in a closer compliance with the regulations and a consequent improvement in the general character of building construction.

In the matter of compensation for the work required of us, and responsibility assumed in the performance of our duties, we again most urgently renew our appeal for an increase of salary to \$1,500 per annum.

Sincerely trusting to your good offices in advancing this request, giving the matter herein stated your favorable consideration, we have the honor to remain,

Most respectfully,

A. M. PROCTOR,
ALBERT S. J. ATKINSON,
S. G. HUNTT,
J. WM. DOWNING,
J. BLAKE CLARK,
E. G. CURTIS,
Assistant Inspectors of Buildings.

The INSPECTOR OF BUILDINGS.

INSPECTOR OF ELEVATORS' REPORT. (FIRST DISTRICT.)

SIR: I have the honor to herewith submit my annual inspection report for the fiscal year ending June 30, 1908, covering the duties assigned me in section south of Pennsylvania avenue from east to west, and west of Tenth street south of Massachusetts avenue.

| | |
|---|-------|
| Number of passenger elevators installed..... | 20 |
| Number of freight elevators installed..... | 21 |
| Alterations of passenger elevators..... | 3 |
| Number of elevators inspected..... | 1,236 |
| Number of condemnations on elevators..... | 1,000 |
| Number of elevators inspected for United States Government..... | 28 |
| Condemnations on elevators for United States Government..... | 26 |
| Number of elevators inspected for District of Columbia..... | 1 |
| Number of condemnations for District of Columbia..... | 0 |
| Miscellaneous inspections..... | 250 |
| Miscellaneous condemnations..... | 21 |

Total number of visits, inspections, and condemnations..... 2,606

Very respectfully,

The INSPECTOR OF BUILDINGS.

WILLIAM I. EVANS,
Inspector of Elevators.

INSPECTOR OF ELEVATORS' REPORT. (SECOND DISTRICT.)

SIR: I have the honor to submit herewith my annual report for the period of my service, beginning March 19, 1908, and ending June 30, 1908, covering the duties assigned me in section north of Pennsylvania avenue from east to Tenth street NW., and north of Massachusetts avenue from Tenth street westward.

| | |
|---|-----|
| Number of passenger elevators installed..... | 12 |
| Number of freight elevators installed..... | 16 |
| Remodeling of passenger elevators..... | 0 |
| Number of elevators inspected..... | 275 |
| Number of condemnations on elevators..... | 450 |
| Number of elevators inspected for United States Government..... | 2 |
| Condemnations on elevators for United States Government..... | 6 |
| Miscellaneous inspections..... | 59 |

Total number of visits, inspections, and condemnations made since the 19th of March, 1908..... 820

Very respectfully,

The INSPECTOR OF BUILDINGS.

W. ST. C. JONES,
Inspector of Elevators.

COMBINED REPORT OF INSPECTORS OF ELEVATORS.

SIR: We have the honor to submit herewith our annual report for fiscal year ending June 30, 1908, together with individual inspection reports.

In submitting our report we can safely say that the elevators in Washington have been remarkably free from defective mechanism that would cause damage to life, limb, and property.

However, three persons have lost their lives on elevators during the past year. One man was killed on an ash lift at the Raleigh Hotel, January 31, 1908, by his own carelessness. The second was killed on an elevator in the Munsey Building, June 15, 1908. While ascending in one of the passenger cars he suddenly fell forward and was killed between the offset in the wall of shaft and floor of car. The third person was killed at the Washington Terminal on a freight elevator by his own carelessness. The verdicts in the cases of these respective accidents were so rendered by the coroner's juries.

The general construction of elevators in this city has materially improved in the last year and we feel that it has been brought about by the careful supervision given by this office. This applies both to new construction and those machines that have been in service for years; and to accomplish this end it has been necessary for your inspectors at times to work day and night, Sundays included.

Commenting on the elevator operators in this city, we would say that about four-fifths of those employed by real-estate agents and owners have not the slightest conception of the machine they are operating. Many times they do not know whether it is a hydraulic or electric machine, and if they do their knowledge ends with the pull of the rope or turn of the switch. One illustration can be given of an operator who had been running an hydraulic elevator for a year or more and when he pulled the rope to ascend he continued to pull all the way up the shaft and when he was asked why he did so he replied that it was necessary, explaining further that it was through his physical efforts that the car reached the top when, as a matter of fact, he was operating a hydraulic machine with 110 pounds of water pressure on the piston. This may furnish some idea of the knowledge of the operators in this city, and we contend now, as has been done in the past, that the only way for Washington to have a good class of operators is to have them all licensed by a regular board of examiners, whose duty it shall be to inquire as to their knowledge of the machines they are operating and also as to their characters. If found qualified a license should be issued them, said licenses being revocable at the discretion of the board, with the approval of the Board of Commissioners.

We urgently ask that the new regulations governing elevators in the District of Columbia be promulgated at the earliest possible moment in order that your inspectors will be in a position to require better elevator construction and at the same time avoid a great deal of misunderstanding that is constantly arising among some elevator firms in this city.

We also wish to take this opportunity to bring to your attention the remuneration attached to the office of inspector of elevators. This office affords a yearly salary of twelve hundred (\$1,200) dollars. The elevator mechanics of this and other cities

are paid \$4.50 for an eight-hour day, with special rates and extra pay for all overtime when the work is done outside of regular hours. They are therefore permitted to earn more than the inspector of elevators, who has to judge and criticise their work. They are also under the supervision of a superintendent employed by their company who, of course, is paid a higher wage, and his work of supervision is under the scrutiny of the inspectors of elevators. We therefore feel that our services should be more liberally compensated, as we are invariably called upon for a much more thorough knowledge of the elevator construction than those who are in charge of the actual work. This would not only justly pay us for our knowledge, skill, long hours, and severe work, but would aid materially in establishing and maintaining the respect due our official positions.

We both thank you for the many courtesies extended us and your very kind consideration in the past year.

Very respectfully,

The INSPECTOR OF BUILDINGS.

WILLIAM I. EVANS,
WALLACE ST. C. JONES,
Inspectors of Elevators.

REPORT OF THE INSPECTOR OF STEAM BOILERS.

JUNE 30, 1908.

Sir: I have the honor to submit the following report for the fiscal year ending June 30, 1908:

| | |
|---|-----|
| Number of boilers inspected..... | 538 |
| District of Columbia inspections..... | 36 |
| Fees still remaining due..... | 18 |
| Number of boilers condemned, unfit for further use..... | 6 |
| Cases of deposit and sediment..... | 35 |
| Cases of incrustation and scale..... | 12 |
| Cases of internal corrosion..... | 6 |
| Cases of external corrosion..... | 9 |
| Cases of internal grooving..... | 8 |
| Defective braces and stays..... | 4 |
| Setting defective..... | 10 |
| Fractured plates..... | 5 |
| Burned plates..... | 8 |
| Blistered plates..... | 10 |
| Defective tubes..... | 48 |
| Defective heads..... | 5 |
| Serious leaks around tube ends..... | 15 |
| Defective blow-off..... | 3 |
| Cases of deficiency of water..... | 2 |
| Safety valves defective..... | 16 |
| Condemned for repairs..... | 28 |
| Defective steam gauges..... | 17 |
| Bulged heads and shell plates..... | 7 |
| Dangerous boilers..... | 3 |

EXPENSES.

| | |
|--|----------|
| Care of horse..... | \$264.00 |
| Shoeing horse..... | 23.50 |
| Premium on bond..... | 10.00 |
| Painting wagon and repairs..... | 20.00 |
| Stationery, printing, and stamps..... | 36.75 |
| Printing business cards, record books..... | 3.75 |
| Candles..... | 3.75 |
| Repairs to wagon and harness..... | 5.00 |
| Blanket and gum cover for horse..... | 4.00 |
| Clerical work..... | 144.00 |
| | <hr/> |
| | 514.75 |
| Total amount received..... | <hr/> |
| Expenses..... | 2,510.00 |
| | <hr/> |
| | 514.75 |

Respectfully submitted.

The INSPECTOR OF BUILDINGS.

E. F. VERMILLION,
Inspector of Steam Boilers.

2,005.25

REPORT OF BOARD OF EXAMINERS, STEAM ENGINEERS.

WASHINGTON, D. C., *August 28, 1908.*

SIR: We herewith submit to you the report of the board of examiners of steam engineers for the year ending June 30, 1908.

The following table shows the work as it progressed from month to month:

| | Meetings held. | Applicants received. | Applicants approved. | Applicants incompetent. | First class. | Second class. | Third class. | Pinkey class. | Special class. | Duplicate. | Revoked. |
|-------------------|----------------|----------------------|----------------------|-------------------------|--------------|---------------|--------------|---------------|----------------|------------|----------|
| 1907. | | | | | | | | | | | |
| July..... | 4 | 18 | 8 | 10 | ..... | ..... | 7 | ..... | ..... | 1 | ..... |
| August..... | 5 | 17 | 8 | 9 | 1 | ..... | 6 | ..... | ..... | 1 | ..... |
| September..... | 5 | 21 | 13 | 8 | 1 | 1 | 10 | ..... | 1 | ..... | ..... |
| October..... | 6 | 21 | 8 | 13 | 1 | 1 | 6 | ..... | ..... | ..... | ..... |
| November..... | 6 | 28 | 14 | 14 | 1 | 1 | 11 | 1 | ..... | ..... | ..... |
| December..... | 7 | 13 | 9 | 4 | 1 | ..... | 3 | 5 | ..... | ..... | ..... |
| 1908. | | | | | | | | | | | |
| January..... | 5 | 24 | 9 | 15 | ..... | 1 | 8 | ..... | ..... | ..... | ..... |
| February..... | 4 | 13 | 6 | 7 | 1 | ..... | 4 | ..... | ..... | 1 | ..... |
| March..... | 4 | 20 | 6 | 11 | ..... | 1 | 5 | ..... | ..... | ..... | ..... |
| April..... | 4 | 16 | 6 | 10 | 1 | ..... | 5 | ..... | ..... | ..... | ..... |
| May..... | 5 | 18 | 12 | 6 | 3 | 2 | 6 | ..... | ..... | 1 | 1 |
| June..... | 4 | 19 | 8 | 11 | ..... | 2 | 3 | ..... | ..... | 3 | ..... |
| Total..... | 50 | 228 | 107 | 121 | 10 | 9 | 74 | 6 | 1 | 7 | 1 |

In addition to the above, we beg to state that it was found necessary during the year to revoke for six months the license of one steam engineer. This action was brought on, however, not by incompetency of the engineer. Complaint was made by his employer that the engineer was on several instances found intoxicated while on duty. The case was given a hearing before the board of examiners, and upon the testimony of witnesses and the confession of the accused sentence was imposed as stated above.

Our estimate of expenses for the year ending June 30, 1910, will be found herewith attached upon the blanks provided for that purpose. We most respectfully ask that the amounts set forth be appropriated.

Respectfully submitted.

E. F. VERMILLION,
H. BOESCH,
DANL. JOHNSON,
Board of Examiners, Steam Engineers.

The INSPECTOR OF BUILDINGS.

REPORT OF THE SUPERINTENDENT OF REPAIRS.

SIR: I have the honor to transmit herewith report of the repair shop for the fiscal year ending June 30, 1908.

Since my last report I have improved on both the office system and the outside workings in many ways. Among these improvements is one covering the keeping of the workmen's time and the rendering semimonthly of pay rolls. Under the present scheme I am advised every morning as to the location of the various men employed for the day previous and the character of the work performed by them. The office work has been reduced considerably by the change in the pay-roll system, whereby but one roll is rendered, where formerly from fifteen to eighteen were prepared. The city has been divided into several districts, with the idea of keeping (as far as possible) one gang of workmen in the same section under the foreman having charge of the buildings in that part of the city; heretofore men employed in the northeastern part of the city on some small job would, when that work was completed, possibly be transferred to the southwest section, which necessarily caused a considerable loss of time and added materially to the entire cost of the job.

Among other things which I consider of great importance is the changing of the present method employed in the purchase of materials. This causes, sometimes serious and always inconvenient, delays, by reason of the fact that the law requires all material to be purchased through the office of the property clerk and the contractors can not, of course, deliver material until they are furnished an official order from his

office. On this account work is often delayed until the necessary materials are delivered at the building where they are to be used. I would respectfully suggest that the honorable Commissioners recommend such changes be made in the laws governing the purchase of materials, whereby I may be given authority to make purchases of stock in quantities, in each case receiving not less than three bids when practicable, and paying for same out of one appropriation and reimbursing this appropriation by repayment vouchers charged to the several funds on account of which said stock from time to time is used.

The necessity for an expert in heating plants becomes more and more apparent as the time passes. If the inspector of buildings was provided with such a man he would be of great value to this office in drawing plans and specifications for and supervising the work when it becomes necessary to repair, alter, or replace apparatus now in use. A man of this type is particularly essential in connection with the plants in the several school buildings. His services could be utilized in many ways, especially in instructing the janitors, which would result in extending the life of the plants and reducing the necessity for extensive repairs, thereby minimizing the cost of repairs. Such general instructions as they receive now and then at their meetings does not suffice where detailed information is imperative, and assuredly those in charge of expensive plants should certainly have the benefit of the services of such an expert.

The present amount that is appropriated for the repair of the buildings is not sufficient to cover all the work which the custodians of the various buildings requested; to make all repairs so requested would cost in the neighborhood of \$300,000. It is my custom to invariably have only such repairs made as would prolong the life of the buildings; this, in part, has caused, in my opinion, an ill feeling toward this office and a lack of cooperation on the part of those who could not have their requests granted.

I am called upon to repair over 300 buildings, all of good size, and of these the schools comprise in number about one-half. If the janitors of these school buildings could be instructed in the use of a few simple tools, a good portion of the appropriation could be saved by having them make the numerous petty repairs, which would save the time and labor of many of my workmen and permit the use of the present cost of same in more important directions.

In my estimate of 1909 I have requested the sum of \$10,000 for the purpose of drilling deep wells in the vicinity of schools in the outlying sections, far remote from water mains, and also in replacing present shallow wells with deep ones, as has been strongly recommended by the health officer of the district. There are at present 12 of these cases, and the amount I have asked for will go far toward bettering the extremely poor conditions which exist at this time.

I have also requested in my estimate \$35,000 for replacing heating plants in several school buildings. There are now in use about 30 of these plants, and a few have deteriorated from age to such an extent that they are continually in need of repairs or new parts, and it is my desire to renew such as are condemned already or will become entirely unfit for use after they have performed their functions for this year.

Although the utmost economy was practiced in the plans and specifications, it has not been possible for this office to equip all the schools deemed unsafe by the chief engineer of the fire department, District of Columbia, with the number of fireproof stairways and fire escapes considered by him to be necessary, for the reason that the appropriation for this purpose was very inadequate. To complete the work I have asked for the sum of \$40,000, which, I believe, will be sufficient to fully equip the school buildings in the manner set forth by him. I have in each case endeavored to procure the best possible results by giving each of the several schools the benefit of a portion of the fund of \$50,000 by installing at least one fireproof stairway and landings and prorating as well as could be done the requisite number of fire escapes, and with this additional amount I am of the opinion that the ideas of the chief engineer can be satisfactorily met.

For several years Congress has been importuned to increase the amounts of the several appropriations for repairs to District buildings, and it was only last year that we were able to secure these increases, and they were paltry ones. I have again in my annual estimate petitioned for larger sums to do work thoroughly which it is impossible to perform to the satisfaction of all concerned under existing conditions. With each ensuing year the necessity for repairs becomes more felt. To emphasize more strongly the above statement I might bring to your attention the fact that the report of the school-house commission of February 27, 1908, recommends the abandonment of such buildings as the Potomac, McCormick, Threlkeld, Berret, J. F. Cook, High Street, Hillsdale, Central High, Johnson Annex, and other schools. Such recommendation surely substantiates my petition for larger sums with which to adequately carry on the work so essential to the preservation of these structures. It can therefore be readily understood that these appropriations, not receiving any substantial increases, must be stretched more and more each year to meet the growing

demands; and to more clearly demonstrate, there were for the fiscal year 1907 approximately 2,300 jobs taken care of by this office, while for the year just ended there were more than 3,000.

The following detailed statement and summary will convey an approximate idea of the amount and class of work performed under my supervision.

Repairs and improvements to school buildings and grounds, 1908.

[Appropriation, \$70,000.]

| Class of work. | Labor. | Material. | Contract. | Total. |
|---|----------|-----------|-----------|----------|
| <i>Abbot School, No. 27.</i> | | | | |
| Carpentering..... | \$384.53 | \$176.31 | ..... | \$560.84 |
| Painting..... | 479.04 | 299.64 | ..... | 778.68 |
| Tinning..... | 61.70 | 16.87 | ..... | 78.57 |
| Miscellaneous..... | ..... | ..... | \$6.45 | 6.45 |
| Material drawn by janitor..... | ..... | 2.72 | ..... | 2.72 |
| Heating..... | ..... | ..... | 76.73 | 76.73 |
| Total..... | 925.27 | 495.54 | 83.18 | 1,503.99 |
| <i>Adams School, No. 65.</i> | | | | |
| Carpentering..... | 72.53 | 107.12 | ..... | 179.65 |
| Painting..... | 61.74 | 19.08 | ..... | 80.82 |
| Tinning..... | 55.44 | 22.72 | ..... | 78.16 |
| Calcfmining..... | ..... | ..... | 49.00 | 49.00 |
| Miscellaneous..... | ..... | ..... | 3.05 | 3.05 |
| Material drawn by janitor..... | ..... | 8.84 | ..... | 8.84 |
| Heating..... | ..... | ..... | 155.03 | 155.03 |
| Total..... | 189.71 | 157.76 | 207.08 | 554.55 |
| <i>Addison School, No. 53.</i> | | | | |
| Carpentering..... | 132.98 | 115.88 | ..... | 248.86 |
| Painting..... | 49.31 | 27.10 | ..... | 76.41 |
| Tinning..... | 55.07 | 22.09 | ..... | 77.16 |
| Calcfmining..... | ..... | ..... | 10.00 | 10.00 |
| Grading..... | 21.00 | ..... | ..... | 21.00 |
| Material drawn by janitor..... | ..... | 6.54 | ..... | 6.54 |
| Heating..... | ..... | ..... | 8.29 | 8.29 |
| Total..... | 258.36 | 171.61 | 18.29 | 448.26 |
| <i>Ambush School, No. 79.</i> | | | | |
| Carpentering..... | 47.63 | 28.92 | ..... | 76.55 |
| Painting..... | 28.28 | 15.03 | 103.00 | 146.31 |
| Tinning..... | 194.57 | 111.35 | ..... | 305.92 |
| Material drawn by janitor..... | ..... | 4.82 | ..... | 4.82 |
| Heating..... | ..... | ..... | 22.56 | 22.56 |
| Total..... | 270.48 | 160.12 | 125.56 | 556.16 |
| <i>Amidon School, No. 42.</i> | | | | |
| Carpentering..... | 80.86 | 140.08 | ..... | 220.94 |
| Painting..... | 33.92 | 24.39 | ..... | 58.31 |
| Tinning..... | 47.25 | 22.33 | ..... | 69.58 |
| Gas engine..... | 25.93 | 8.10 | ..... | 34.03 |
| Material drawn by janitor..... | ..... | 3.42 | ..... | 3.42 |
| Total..... | 187.96 | 198.22 | ..... | 386.28 |
| <i>Armstrong Manual Training School, No. 129.</i> | | | | |
| Carpentering..... | 276.72 | 197.31 | ..... | 474.03 |
| Painting..... | 140.11 | 102.40 | ..... | 242.51 |
| Tinning..... | 133.31 | 45.99 | ..... | 179.21 |
| Material drawn by janitor..... | ..... | 18.47 | ..... | 18.47 |
| Steam fitting..... | 77.29 | 23.43 | ..... | 100.72 |
| Total..... | 627.43 | 387.51 | ..... | 1,014.94 |
| <i>Arthur School, No. 70.</i> | | | | |
| Carpentering..... | 74.38 | 47.49 | ..... | 121.87 |
| Painting..... | 29.20 | 15.77 | ..... | 44.97 |
| Tinning..... | 71.73 | 23.98 | ..... | 95.71 |
| Miscellaneous..... | ..... | ..... | 3.45 | 3.45 |
| Material drawn by janitor..... | ..... | 8.20 | ..... | 8.20 |
| Heating..... | ..... | ..... | 17.05 | 17.05 |
| Total..... | 175.31 | 95.44 | 20.50 | 291.25 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|-------------------------------------|----------|-----------|-----------|----------|
| <i>Anacostia Road School.</i> | | | | |
| Carpentering..... | \$30. 73 | \$17. 35 | ..... | \$48. 08 |
| Tinning..... | 13. 07 | ..... | ..... | 13. 07 |
| Total..... | 43. 80 | 17. 35 | ..... | 61. 15 |
| <i>Banneker School, No. 39.</i> | | | | |
| Carpentering..... | 137. 74 | 189. 95 | ..... | 327. 69 |
| Painting..... | 139. 86 | 49. 44 | ..... | 189. 30 |
| Tinning..... | 70. 01 | 31. 94 | ..... | 101. 95 |
| Gas engine..... | 15. 20 | 5. 52 | ..... | 20. 72 |
| Material drawn by janitor..... | ..... | 2. 72 | ..... | 2. 72 |
| Heating..... | ..... | ..... | \$14. 88 | 14. 88 |
| Total..... | 362. 81 | 279. 57 | 14. 88 | 657. 26 |
| <i>Bell School, No. 78.</i> | | | | |
| Carpentering..... | 41. 60 | 22. 88 | ..... | 64. 48 |
| Painting..... | 49. 64 | 31. 69 | ..... | 81. 33 |
| Tinning..... | 69. 57 | 33. 16 | ..... | 102. 73 |
| Calclmining..... | ..... | ..... | 63. 00 | 63. 00 |
| Miscellaneous..... | ..... | ..... | 3. 38 | 3. 38 |
| Material drawn by janitor..... | ..... | 14. 54 | ..... | 14. 54 |
| Heating..... | ..... | ..... | 91. 14 | 91. 14 |
| Total..... | 160. 81 | 102. 27 | 157. 52 | 420. 60 |
| <i>Benning School, No. 48.</i> | | | | |
| Carpentering..... | 92. 18 | 59. 95 | ..... | 152. 13 |
| Painting..... | 25. 54 | 14. 37 | ..... | 39. 91 |
| Material drawn by janitor..... | ..... | 3. 42 | ..... | 3. 42 |
| Total..... | 117. 72 | 77. 74 | ..... | 195. 46 |
| <i>Benning Road School, No. 56.</i> | | | | |
| Carpentering..... | 145. 35 | 48. 01 | ..... | 193. 36 |
| Painting..... | 23. 14 | 14. 45 | ..... | 37. 59 |
| Tinning..... | 39. 46 | 15. 51 | ..... | 54. 97 |
| Calclmining..... | ..... | ..... | 65. 00 | 65. 00 |
| Cleaning well..... | ..... | ..... | 10. 00 | 10. 00 |
| Material drawn by janitor..... | ..... | 2. 49 | ..... | 2. 49 |
| Total..... | 207. 95 | 80. 46 | 75. 00 | 363. 41 |
| <i>Berret School, No. 56.</i> | | | | |
| Carpentering..... | 44. 73 | 22. 55 | ..... | 67. 28 |
| Painting..... | 28. 40 | 15. 11 | ..... | 43. 51 |
| Tinning..... | 26. 57 | 18. 37 | ..... | 44. 94 |
| Miscellaneous..... | ..... | ..... | 26. 30 | 26. 30 |
| Material drawn by janitor..... | ..... | 2. 72 | ..... | 2. 72 |
| Heating..... | ..... | ..... | 31. 68 | 31. 68 |
| Total..... | 99. 70 | 59. 05 | 57. 98 | 216. 73 |
| <i>Birney School, No. 127.</i> | | | | |
| Carpentering..... | 50. 41 | 51. 92 | ..... | 102. 33 |
| Painting..... | 193. 06 | 34. 21 | ..... | 227. 27 |
| Tinning..... | 27. 68 | 13. 61 | ..... | 41. 29 |
| Gas engine..... | 25. 36 | 5. 20 | ..... | 30. 56 |
| Material drawn by janitor..... | ..... | 4. 87 | ..... | 4. 87 |
| Heating..... | ..... | ..... | 21. 70 | 21. 70 |
| Total..... | 296. 51 | 109. 81 | 21. 70 | 428. 02 |
| <i>Birney School Annex.</i> | | | | |
| Carpentering..... | 55. 92 | 27. 81 | ..... | 83. 73 |
| Painting..... | 39. 62 | 16. 66 | ..... | 56. 28 |
| Tinning..... | 33. 07 | 15. 02 | ..... | 48. 09 |
| Material drawn by janitor..... | ..... | 2. 72 | ..... | 2. 72 |
| Total..... | 128. 61 | 62. 21 | ..... | 190. 82 |
| <i>Blair School, No. 50.</i> | | | | |
| Carpentering..... | 113. 52 | 63. 19 | ..... | 176. 71 |
| Painting..... | 54. 13 | 23. 44 | ..... | 77. 57 |
| Tinning..... | 73. 00 | 32. 44 | ..... | 105. 44 |
| Gas engine..... | 43. 57 | 18. 57 | ..... | 62. 14 |
| Material drawn by janitor..... | ..... | 11. 41 | ..... | 11. 41 |
| Heating..... | ..... | ..... | 7. 75 | 7. 75 |
| Total..... | 284. 22 | 149. 05 | 7. 75 | 441. 02 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|-------------------------------------|----------|-----------|-----------|----------|
| <i>Blake School, No. 61.</i> | | | | |
| Carpentering..... | \$112.36 | \$82.09 | | \$194.45 |
| Painting..... | 181.06 | 60.43 | | 241.49 |
| Tinning..... | 23.13 | 11.91 | | 35.04 |
| Material drawn by janitor..... | | 4.81 | | 4.81 |
| Heating..... | | | \$25.43 | 25.43 |
| Total..... | 316.55 | 159.24 | 25.43 | 501.22 |
| <i>Blow School, No. 145.</i> | | | | |
| Carpentering..... | 54.10 | 46.75 | | 100.85 |
| Painting..... | 43.14 | 20.51 | | 63.65 |
| Tinning..... | 143.51 | 53.86 | | 197.37 |
| Gas engine..... | 18.66 | 9.24 | | 27.90 |
| Material drawn by janitor..... | | 3.96 | | 3.96 |
| Heating..... | | | 12.79 | 12.79 |
| Total..... | 259.41 | 134.32 | 12.79 | 406.52 |
| <i>A. Bowen School, No. 109.</i> | | | | |
| Carpentering..... | 51.10 | 24.88 | | 75.98 |
| Painting..... | 28.89 | 16.63 | | 45.52 |
| Tinning..... | 42.63 | 22.21 | | 64.84 |
| Gas engine..... | 22.25 | 4.22 | | 26.47 |
| Material drawn by janitor..... | | 3.68 | | 3.68 |
| Heating..... | | | 11.93 | 11.93 |
| Total..... | 144.87 | 71.62 | 11.93 | 228.42 |
| <i>S. J. Bowen School, No. 123.</i> | | | | |
| Carpentering..... | 71.10 | 41.08 | | 112.18 |
| Painting..... | 32.29 | 15.82 | 146.00 | 194.11 |
| Tinning..... | 72.69 | 15.04 | | 87.73 |
| Calceining..... | | | 63.00 | 63.00 |
| Steam fitting..... | 10.38 | 4.36 | 280.00 | 294.74 |
| Material drawn by janitor..... | | 16.17 | | 16.17 |
| Total..... | 186.46 | 92.47 | 489.00 | 767.93 |
| <i>Bradley School, No. 60.</i> | | | | |
| Carpentering..... | 52.39 | 21.68 | | 74.07 |
| Painting..... | 32.92 | 16.64 | | 49.56 |
| Tinning..... | 31.38 | 13.79 | | 45.17 |
| Material drawn by janitor..... | | 7.17 | | 7.17 |
| Heating..... | | | 6.59 | 6.59 |
| Total..... | 116.69 | 59.28 | 6.59 | 182.56 |
| <i>Brent School, No. 46.</i> | | | | |
| Carpentering..... | 76.51 | 108.06 | | 184.57 |
| Painting..... | 45.39 | 21.96 | | 67.35 |
| Tinning..... | 38.51 | 14.28 | | 52.79 |
| Gas engine..... | 27.69 | 28.48 | | 56.17 |
| Material drawn by janitor..... | | 8.85 | | 8.85 |
| Heating..... | | | 16.74 | 16.74 |
| Total..... | 188.10 | 181.63 | 16.74 | 386.47 |
| <i>Briggs School, No. 75.</i> | | | | |
| Carpentering..... | 41.78 | 32.15 | | 73.93 |
| Painting..... | 27.42 | 18.55 | 170.00 | 215.97 |
| Tinning..... | 59.69 | 23.26 | | 82.95 |
| Material drawn by janitor..... | | 8.72 | | 8.72 |
| Heating..... | | | 37.20 | 37.20 |
| Total..... | 128.89 | 82.68 | 207.20 | 418.77 |
| <i>Brightwood School, No. 104.</i> | | | | |
| Carpentering..... | 118.38 | 37.75 | | 156.13 |
| Painting..... | 46.79 | 19.16 | | 65.95 |
| Tinning..... | 23.07 | 11.86 | | 34.93 |
| Calceining..... | | | 75.00 | 75.00 |
| Miscellaneous..... | 2.25 | .75 | | 3.00 |
| Material drawn by janitor..... | | 8.73 | | 8.73 |
| Steam fitting..... | | | 26.00 | 26.00 |
| Total..... | 190.49 | 77.75 | 101.00 | 369.24 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|---|---------|-----------|-----------|----------|
| <i>Brookland School, No. 103.</i> | | | | |
| Carpentering..... | \$87.65 | \$56.04 | | \$143.69 |
| Painting..... | 34.54 | 18.92 | | 53.46 |
| Tinning..... | 76.26 | 26.38 | | 102.64 |
| Grading..... | 109.26 | 55.81 | | 165.07 |
| Cement work..... | | | \$232.10 | 232.10 |
| Material drawn by janitor..... | | 8.75 | | 8.75 |
| Steam fitting..... | 4.75 | .37 | 221.00 | 226.12 |
| Total..... | 312.46 | 166.27 | 453.10 | 931.83 |
| <i>Bruce School, No. 112.</i> | | | | |
| Carpentering..... | 67.91 | 40.46 | | 108.37 |
| Painting..... | 145.45 | 43.72 | | 189.17 |
| Tinning..... | 75.89 | 29.50 | | 105.39 |
| Gas engine..... | 20.43 | 12.15 | | 32.58 |
| Calclmining..... | | | 63.00 | 63.00 |
| Material drawn by janitor..... | | 10.24 | | 10.24 |
| Heating..... | | | 18.60 | 18.60 |
| Total..... | 309.68 | 136.07 | 81.60 | 527.35 |
| <i>Buchanan School, No. 96.</i> | | | | |
| Carpentering..... | 113.49 | 103.04 | | 216.53 |
| Painting..... | 182.40 | 49.40 | | 231.80 |
| Tinning..... | 27.32 | 11.24 | | 38.56 |
| Miscellaneous..... | | | 11.00 | 11.00 |
| Material drawn by janitor..... | | 18.02 | | 18.02 |
| Heating..... | | | 39.97 | 39.97 |
| Total..... | 323.21 | 181.70 | 50.97 | 555.88 |
| <i>Bunker Hill Road School, No. 47.</i> | | | | |
| Carpentering..... | 60.66 | 29.62 | | 90.28 |
| Painting..... | 18.98 | 11.11 | | 30.09 |
| Tinning..... | 41.26 | 15.21 | | 56.47 |
| Miscellaneous..... | | | 10.88 | 10.88 |
| Total..... | 120.90 | 55.94 | 10.88 | 187.72 |
| <i>Burrville School, No. 91.</i> | | | | |
| Carpentering..... | 210.40 | 143.00 | | 353.40 |
| Painting..... | 53.90 | 23.41 | | 77.31 |
| Tinning..... | 49.63 | 13.63 | | 63.26 |
| Cleaning well..... | | | 10.00 | 10.00 |
| Material drawn by janitor..... | | 1.09 | | 1.09 |
| Total..... | 313.93 | 181.13 | 10.00 | 505.06 |
| <i>Business High School, No. 144.</i> | | | | |
| Carpentering..... | 121.00 | 58.41 | | 179.41 |
| Painting..... | 57.17 | 24.24 | | 81.41 |
| Tinning..... | 43.49 | 18.22 | | 61.71 |
| Miscellaneous..... | 13.63 | 3.50 | | 17.13 |
| Material drawn by janitor..... | | 51.18 | | 51.18 |
| Steam fitting..... | | | 8.50 | 8.50 |
| Total..... | 235.29 | 155.55 | 8.50 | 399.34 |
| <i>Cardery School, No. 58.</i> | | | | |
| Carpentering..... | 204.00 | 190.18 | | 394.18 |
| Painting..... | 143.04 | 52.84 | | 195.88 |
| Tinning..... | 74.32 | 28.62 | | 102.94 |
| Miscellaneous..... | | | 3.45 | 3.45 |
| Material drawn by janitor..... | | 11.55 | | 11.55 |
| Heating..... | | | 94.30 | 94.30 |
| Total..... | 421.36 | 283.19 | 97.75 | 802.30 |
| <i>Cardozo School, No. 148.</i> | | | | |
| Carpentering..... | 38.10 | 18.91 | | 57.01 |
| Painting..... | 25.98 | 14.95 | | 40.93 |
| Tinning..... | 25.32 | 13.79 | | 39.11 |
| Grading..... | 33.38 | 97.38 | | 130.76 |
| Gas engine..... | 10.77 | 7.41 | | 18.18 |
| Material drawn by janitor..... | | 5.32 | | 5.32 |
| Total..... | 133.55 | 157.76 | | 291.31 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|---|----------|-----------|-----------|------------|
| <i>Central High School, No. 43.</i> | | | | |
| Carpentering..... | \$833.51 | \$446.88 | ..... | \$1,280.39 |
| Painting..... | 116.16 | 58.59 | ..... | 174.75 |
| Tinning..... | 114.38 | 40.02 | ..... | 154.40 |
| Material drawn by janitor..... | ..... | 35.19 | ..... | 35.19 |
| Steam fitting..... | 60.40 | 15.89 | ..... | 76.29 |
| Electric work..... | 5.00 | 11.36 | \$4.25 | 20.61 |
| Medusa compound floor in chemical laboratory..... | ..... | ..... | 444.00 | 444.00 |
| Total..... | 1,129.45 | 607.93 | 448.25 | 2,185.63 |
| <i>Chain Bridge Road School, No. 6.</i> | | | | |
| Carpentering..... | 87.20 | 48.65 | ..... | 135.85 |
| Painting..... | 26.42 | 13.49 | ..... | 39.91 |
| Tinning..... | 21.07 | 13.26 | ..... | 34.33 |
| Material drawn by janitor..... | ..... | 1.13 | ..... | 1.13 |
| Total..... | 134.69 | 76.53 | ..... | 211.22 |
| <i>Chevy Chase School, No. 113.</i> | | | | |
| Carpentering..... | 73.45 | 37.80 | ..... | 111.25 |
| Painting..... | 138.54 | 59.84 | ..... | 198.38 |
| Tinning..... | 26.07 | 11.26 | ..... | 37.33 |
| Material drawn by janitor..... | ..... | 2.88 | ..... | 2.88 |
| Heating..... | ..... | ..... | 250.00 | 250.00 |
| Total..... | 238.06 | 111.78 | 250.00 | 599.84 |
| <i>Conduit Road School, No. 25.</i> | | | | |
| Carpentering..... | 42.85 | 20.75 | ..... | 63.60 |
| Painting..... | 17.68 | 11.51 | ..... | 29.19 |
| Tinning..... | 24.07 | 11.40 | ..... | 35.53 |
| Digging well..... | ..... | ..... | 111.00 | 111.00 |
| Material drawn by janitor..... | ..... | 1.09 | ..... | 1.09 |
| Total..... | 84.60 | 44.81 | 111.00 | 240.41 |
| <i>Congress Heights School, No. 111.</i> | | | | |
| Carpentering..... | 375.10 | 212.44 | ..... | 587.54 |
| Painting..... | 101.06 | 30.55 | ..... | 131.61 |
| Tinning..... | 34.20 | 15.97 | ..... | 50.17 |
| Cleaning well..... | ..... | ..... | 10.00 | 10.00 |
| Material drawn by janitor..... | ..... | 10.22 | ..... | 10.22 |
| Heating..... | ..... | ..... | 14.73 | 14.73 |
| Total..... | 510.36 | 269.18 | 24.73 | 804.27 |
| <i>Cook School, No. 30.</i> | | | | |
| Carpentering..... | 97.02 | 120.46 | ..... | 217.48 |
| Painting..... | 38.26 | 17.93 | ..... | 56.19 |
| Tinning..... | 89.76 | 37.77 | ..... | 127.53 |
| Gas engine..... | 18.05 | 15.64 | ..... | 33.69 |
| Cal mining..... | ..... | ..... | 145.00 | 145.00 |
| Miscellaneous..... | 6.50 | .50 | ..... | 7.00 |
| Material drawn by janitor..... | ..... | 9.32 | ..... | 9.32 |
| Heating..... | ..... | ..... | 31.78 | 31.78 |
| Total..... | 249.59 | 201.62 | 176.78 | 627.99 |
| <i>Corcoran School, No. 68.</i> | | | | |
| Carpentering..... | 84.52 | 78.59 | ..... | 163.11 |
| Painting..... | 46.29 | 20.79 | ..... | 67.08 |
| Tinning..... | 49.95 | 31.30 | ..... | 81.25 |
| Material drawn by janitor..... | ..... | 4.57 | ..... | 4.57 |
| Heating..... | ..... | ..... | 25.57 | 25.57 |
| Total..... | 180.76 | 135.25 | 25.57 | 341.58 |
| <i>Cranch School, No. 137.</i> | | | | |
| Carpentering..... | 70.22 | 44.66 | ..... | 114.88 |
| Painting..... | 53.56 | 27.06 | ..... | 81.22 |
| Tinning..... | 67.13 | 16.85 | ..... | 83.98 |
| Material drawn by janitor..... | ..... | 12.51 | ..... | 12.51 |
| Total..... | 190.91 | 101.68 | ..... | 292.59 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|-------------------------------------|----------|-----------|-----------|----------|
| <i>Curtis School, No. 26.</i> | | | | |
| Carpentering..... | \$130.12 | \$50.28 | ..... | \$180.40 |
| Painting..... | 56.04 | 30.49 | ..... | 86.53 |
| Tinning..... | 32.13 | 13.93 | ..... | 46.06 |
| Grading..... | 100.50 | 96.20 | ..... | 196.70 |
| Cement work..... | ..... | ..... | \$116.00 | 116.00 |
| Miscellaneous..... | 2.25 | .75 | ..... | 3.00 |
| Material drawn by janitor..... | ..... | 16.11 | ..... | 16.11 |
| Steam fitting..... | 6.50 | 4.12 | ..... | 10.62 |
| Total..... | 327.54 | 211.88 | 116.00 | 655.42 |
| <i>Dennison School, No. 52.</i> | | | | |
| Carpentering..... | 102.61 | 62.84 | ..... | 165.45 |
| Painting..... | 74.55 | 54.68 | ..... | 129.23 |
| Tinning..... | 102.76 | 25.85 | ..... | 128.61 |
| Miscellaneous..... | 11.50 | 2.75 | ..... | 14.25 |
| Material drawn by janitor..... | ..... | 16.36 | ..... | 16.36 |
| Steam fitting..... | 7.94 | 4.70 | ..... | 12.64 |
| Total..... | 299.36 | 167.18 | ..... | 466.54 |
| <i>Dent School, No. 120.</i> | | | | |
| Carpentering..... | 86.91 | 41.05 | ..... | 127.96 |
| Painting..... | 35.06 | 22.58 | ..... | 57.64 |
| Tinning..... | 49.07 | 29.96 | ..... | 79.03 |
| Grading..... | 6.00 | ..... | ..... | 6.00 |
| Gas engine..... | 25.38 | 12.84 | ..... | 38.22 |
| Calcuttining..... | ..... | ..... | 25.00 | 25.00 |
| Miscellaneous..... | 7.50 | 1.50 | ..... | 9.00 |
| Material drawn by janitor..... | ..... | 17.09 | ..... | 17.09 |
| Heating..... | ..... | ..... | 25.58 | 25.58 |
| Total..... | 209.92 | 125.02 | 50.58 | 385.52 |
| <i>Douglas School, No. 99.</i> | | | | |
| Carpentering..... | 63.05 | 40.92 | ..... | 103.97 |
| Painting..... | 29.54 | 13.31 | ..... | 42.85 |
| Tinning..... | 88.07 | 28.20 | ..... | 116.27 |
| Gas engine..... | 15.55 | 7.99 | ..... | 23.54 |
| Material drawn by janitor..... | ..... | 3.42 | ..... | 3.42 |
| Heating..... | ..... | ..... | 23.06 | 23.06 |
| Total..... | 196.21 | 93.84 | 23.06 | 319.11 |
| <i>Eastern High School, No. 85.</i> | | | | |
| Carpentering..... | 567.33 | 380.28 | ..... | 947.61 |
| Painting..... | 124.01 | 53.26 | ..... | 177.27 |
| Tinning..... | 146.37 | 40.40 | ..... | 186.77 |
| Material drawn by janitor..... | ..... | 17.79 | ..... | 17.79 |
| Steam fitting..... | 4.50 | .35 | 1.50 | 6.35 |
| Heating..... | ..... | ..... | 14.83 | 14.83 |
| Total..... | 842.21 | 492.08 | 16.33 | 1,350.62 |
| <i>Eckington School, No. 116.</i> | | | | |
| Carpentering..... | 89.90 | 40.14 | ..... | 130.04 |
| Painting..... | 309.54 | 96.28 | ..... | 405.82 |
| Tinning..... | 77.38 | 22.88 | ..... | 100.26 |
| Gas engine..... | 19.93 | 9.67 | ..... | 29.60 |
| Material drawn by janitor..... | ..... | 5.98 | ..... | 5.98 |
| Heating..... | ..... | ..... | 56.30 | 56.30 |
| Total..... | 496.75 | 174.95 | 56.30 | 728.00 |
| <i>Edmonds School, No. 135.</i> | | | | |
| Carpentering..... | 62.51 | 30.38 | ..... | 92.89 |
| Painting..... | 71.46 | 19.40 | ..... | 90.86 |
| Tinning..... | 30.57 | 11.34 | ..... | 41.91 |
| Gas engine..... | 33.63 | 15.45 | ..... | 49.08 |
| Material drawn by janitor..... | ..... | 8.61 | ..... | 8.61 |
| Heating..... | ..... | ..... | 2.33 | 2.33 |
| Total..... | 198.17 | 85.18 | 2.33 | 285.68 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------------|---------|-----------|-----------|----------|
| <i>Emery School, No. 133.</i> | | | | |
| Carpentering..... | \$38.52 | \$37.48 | | \$136.00 |
| Painting..... | 43.76 | 21.54 | | 65.30 |
| Tinning..... | 109.57 | 44.54 | | 154.11 |
| Miscellaneous..... | | | \$5.00 | 5.00 |
| Material drawn by janitor..... | | 19.26 | | 19.26 |
| Heating..... | | | 4.92 | 4.92 |
| Total..... | 251.85 | 122.82 | 9.92 | 384.59 |
| <i>Fillmore School, No. 92.</i> | | | | |
| Carpentering..... | 42.31 | 23.65 | | 65.96 |
| Painting..... | 42.25 | 21.24 | | 63.49 |
| Tinning..... | 31.88 | 13.87 | | 45.75 |
| Miscellaneous..... | | | 3.45 | 3.45 |
| Material drawn by janitor..... | | 9.34 | | 9.34 |
| Heating..... | | | 29.43 | 29.43 |
| Total..... | 116.44 | 68.10 | 32.88 | 217.42 |
| <i>Force School, No. 32.</i> | | | | |
| Carpentering..... | 153.24 | 195.73 | | 348.97 |
| Painting..... | 36.79 | 19.42 | | 56.21 |
| Tinning..... | 33.45 | 13.18 | | 46.63 |
| Calclmining..... | | | 105.00 | 105.00 |
| Miscellaneous..... | 5.00 | | | 5.00 |
| Material drawn by janitor..... | | 16.70 | | 16.70 |
| Steam fitting..... | 3.75 | 2.56 | | 6.31 |
| Total..... | 232.23 | 247.59 | 105.00 | 584.82 |
| <i>Franklin School, No. 15.</i> | | | | |
| Carpentering..... | 489.76 | 427.69 | | 917.45 |
| Painting..... | 289.17 | 133.32 | | 422.49 |
| Tinning..... | 77.66 | 46.72 | | 124.38 |
| Calclmining..... | | | 275.00 | 275.00 |
| Material drawn by janitor..... | | 8.17 | | 8.17 |
| Heating..... | | | 23.38 | 23.38 |
| Treads..... | | | 534.24 | 534.24 |
| Total..... | 856.59 | 615.90 | 832.02 | 2,305.11 |
| <i>B. B. French School, No. 144.</i> | | | | |
| Carpentering..... | 37.09 | 18.82 | | 55.91 |
| Painting..... | 23.36 | 15.77 | | 39.13 |
| Tinning..... | 22.07 | 12.16 | | 34.23 |
| Gas engine..... | 9.87 | 8.73 | | 18.60 |
| Material drawn by janitor..... | | 3.55 | | 3.55 |
| Heating..... | | | 31.00 | 31.00 |
| Total..... | 92.39 | 59.03 | 31.00 | 182.42 |
| <i>Fort Slocum.</i> | | | | |
| Carpentering..... | 51.74 | 30.68 | | 82.42 |
| Calclmining..... | | | 35.00 | 35.00 |
| Cleaning well..... | | | 10.00 | 10.00 |
| Total..... | 51.74 | 30.68 | 45.00 | 127.42 |
| <i>Gage School, No. 143.</i> | | | | |
| Carpentering..... | 54.08 | 31.75 | | 85.83 |
| Painting..... | 29.32 | 15.71 | | 45.03 |
| Tinning..... | 50.07 | 11.61 | | 61.68 |
| Gas engine..... | 11.77 | | | 11.77 |
| Material drawn by janitor..... | | 12.31 | | 12.31 |
| Total..... | 145.24 | 71.38 | | 216.62 |
| <i>Gales School, No. 36.</i> | | | | |
| Carpentering..... | 89.57 | 46.84 | | 136.41 |
| Painting..... | 33.18 | 17.24 | | 50.42 |
| Tinning..... | 24.88 | 13.05 | | 37.93 |
| Calclmining..... | | | 119.00 | 119.00 |
| Repairing fence..... | | | 34.60 | 34.60 |
| Material drawn by janitor..... | | 17.60 | | 17.60 |
| Steam fitting..... | 12.98 | .80 | 332.00 | 333.00 |
| Heating..... | | | 2.60 | 2.60 |
| Total..... | 160.61 | 95.53 | 489.20 | 745.34 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|-----------------------------------|----------|-----------|-----------|----------|
| <i>Garfield School, No. 103.</i> | | | | |
| Carpentering..... | \$253.93 | \$199.07 | ..... | \$453.05 |
| Painting..... | 51.79 | 31.16 | ..... | 82.95 |
| Tinning..... | 88.26 | 44.35 | ..... | 132.61 |
| Cleaning well..... | ..... | ..... | \$7.50 | 7.50 |
| Material drawn by janitor..... | ..... | 4.13 | ..... | 4.13 |
| Heating..... | ..... | ..... | 2.25 | 2.25 |
| Total..... | 334.03 | 278.71 | 9.75 | 682.49 |
| <i>Garnet School, No. 34.</i> | | | | |
| Carpentering..... | 67.93 | 43.02 | ..... | 110.95 |
| Painting..... | 21.68 | 19.72 | 183.00 | 224.40 |
| Tinning..... | 44.32 | 24.34 | ..... | 68.66 |
| Grading and cement work..... | 35.94 | 7.30 | ..... | 43.24 |
| Cement pavement..... | ..... | ..... | 90.90 | 90.90 |
| Improving gas system..... | ..... | ..... | 51.40 | 51.40 |
| Material drawn by janitor..... | ..... | 10.85 | ..... | 10.85 |
| Total..... | 169.87 | 105.23 | 325.30 | 600.40 |
| <i>Garrison School, No. 76.</i> | | | | |
| Carpentering..... | 71.49 | 70.71 | ..... | 142.20 |
| Painting..... | 36.04 | 17.15 | ..... | 43.19 |
| Tinning..... | 29.45 | 12.24 | ..... | 41.69 |
| Miscellaneous..... | ..... | ..... | 2.30 | 2.30 |
| Material drawn by janitor..... | ..... | 5.86 | ..... | 5.86 |
| Heating..... | ..... | ..... | 10.75 | 10.75 |
| Total..... | 136.98 | 105.96 | 13.05 | 255.99 |
| <i>Gidding School, No. 63.</i> | | | | |
| Carpentering..... | 209.65 | 336.29 | ..... | 645.94 |
| Painting..... | 119.93 | 27.76 | ..... | 147.74 |
| Tinning..... | 36.00 | 13.72 | ..... | 49.72 |
| Calclmining..... | ..... | ..... | 63.00 | 63.00 |
| Material drawn by janitor..... | ..... | 4.88 | ..... | 4.88 |
| Heating..... | ..... | ..... | 15.56 | 15.56 |
| Total..... | 465.63 | 382.65 | 78.55 | 926.84 |
| <i>Good Hope School, No. 73.</i> | | | | |
| Carpentering..... | 57.09 | 48.25 | ..... | 105.34 |
| Painting..... | 18.54 | 11.91 | ..... | 30.45 |
| Cleaning well..... | ..... | ..... | 7.50 | 7.50 |
| Total..... | 75.63 | 60.16 | 7.50 | 143.29 |
| <i>Grant School, No. 41.</i> | | | | |
| Carpentering..... | 104.52 | 58.45 | ..... | 162.97 |
| Painting..... | 70.68 | 23.32 | ..... | 94.00 |
| Tinning..... | 145.01 | 106.79 | ..... | 251.80 |
| Material drawn by janitor..... | ..... | 8.19 | ..... | 8.19 |
| Steamfitting..... | 41.03 | 9.22 | 43.50 | 93.75 |
| Total..... | 361.24 | 205.97 | 43.50 | 610.71 |
| <i>Greenleaf School, No. 105.</i> | | | | |
| Carpentering..... | 49.09 | 42.55 | ..... | 91.64 |
| Painting..... | 35.50 | 24.73 | ..... | 60.23 |
| Tinning..... | 187.13 | 116.77 | ..... | 303.90 |
| Gas engine..... | 13.03 | 3.72 | ..... | 16.75 |
| Material drawn by janitor..... | ..... | 4.13 | ..... | 4.13 |
| Calclmining..... | ..... | ..... | 50.00 | 50.00 |
| Miscellaneous..... | ..... | ..... | 7.00 | 7.00 |
| Heating..... | ..... | ..... | 12.61 | 12.61 |
| Total..... | 282.75 | 191.90 | 69.61 | 544.26 |
| <i>Hamilton School, No. 37.</i> | | | | |
| Carpentering..... | 88.59 | 46.35 | ..... | 134.94 |
| Painting..... | 23.64 | 12.82 | ..... | 36.46 |
| Tinning..... | 163.82 | 67.89 | ..... | 231.71 |
| Grading..... | 151.75 | 7.81 | ..... | 159.56 |
| Cleaning well..... | ..... | ..... | 10.00 | 10.00 |
| Material drawn by janitor..... | ..... | 1.09 | ..... | 1.09 |
| Heating..... | ..... | ..... | 3.50 | 3.50 |
| Total..... | 427.80 | 135.96 | 13.50 | 577.26 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|-----------------------------------|---------|-----------|-----------|----------|
| <i>Harrison School, No. 84.</i> | | | | |
| Carpentering..... | \$63.78 | \$107.82 | ----- | \$170.80 |
| Painting..... | 57.69 | 18.57 | ----- | 76.26 |
| Tinning..... | 54.01 | 15.36 | ----- | 69.37 |
| Calceining..... | ----- | ----- | \$19.00 | 19.00 |
| Material drawn by janitor..... | ----- | 9.15 | ----- | 9.15 |
| Heating..... | ----- | ----- | 3.49 | 3.49 |
| Total..... | 175.48 | 150.10 | 22.49 | 348.07 |
| <i>Hayes School, No. 107.</i> | | | | |
| Carpentering..... | 92.96 | 49.79 | ----- | 142.55 |
| Painting..... | 37.79 | 20.28 | ----- | 58.07 |
| Tinning..... | 42.26 | 13.15 | ----- | 55.41 |
| Material drawn by janitor..... | ----- | 20.34 | ----- | 20.34 |
| Grading..... | 124.19 | 103.29 | ----- | 227.48 |
| Gas engine..... | 24.86 | 8.51 | ----- | 33.17 |
| Heating..... | ----- | ----- | 7.31 | 7.31 |
| Total..... | 322.06 | 214.96 | 7.31 | 544.3 |
| <i>Henry School, No. 33.</i> | | | | |
| Carpentering..... | 340.53 | 150.55 | ----- | 491.08 |
| Painting..... | 248.54 | 78.11 | ----- | 326.65 |
| Tinning..... | 30.07 | 11.35 | ----- | 41.42 |
| Miscellaneous..... | ----- | ----- | 1.25 | 1.25 |
| Material drawn by janitor..... | ----- | 13.65 | ----- | 13.65 |
| Steamfitting..... | .66 | .49 | ----- | 1.15 |
| Heating..... | ----- | ----- | 2.08 | 2.08 |
| Total..... | 619.80 | 254.15 | 3.33 | 877.28 |
| <i>High Street School, No. 1.</i> | | | | |
| Carpentering..... | 41.09 | 30.33 | ----- | 71.42 |
| Painting..... | 21.74 | 12.10 | ----- | 33.84 |
| Tinning..... | 20.44 | 12.01 | ----- | 32.45 |
| Total..... | 83.27 | 54.44 | ----- | 137.71 |
| <i>Hilton School, No. 115.</i> | | | | |
| Carpentering..... | 45.09 | 21.10 | ----- | 66.19 |
| Painting..... | 28.18 | 16.65 | ----- | 44.83 |
| Tinning..... | 53.57 | 17.93 | ----- | 71.50 |
| Gas engine..... | 16.93 | 16.90 | ----- | 33.83 |
| Material drawn by janitor..... | ----- | 8.75 | ----- | 8.75 |
| Heating..... | ----- | ----- | 10.03 | 10.03 |
| Total..... | 143.77 | 81.33 | 10.03 | 235.13 |
| <i>Hubbard School, No. 119.</i> | | | | |
| Carpentering..... | 63.32 | 40.01 | ----- | 103.33 |
| Painting..... | 45.14 | 23.01 | ----- | 68.15 |
| Tinning..... | 41.50 | 21.38 | ----- | 62.88 |
| Gas engine..... | 9.99 | 13.10 | ----- | 23.09 |
| Material drawn by janitor..... | ----- | 3.91 | ----- | 3.91 |
| Heating..... | ----- | ----- | 9.14 | 9.14 |
| Total..... | 159.95 | 101.41 | 9.14 | 270.50 |
| <i>Hyde School, No. 147.</i> | | | | |
| Carpentering..... | 43.97 | 25.75 | ----- | 69.72 |
| Painting..... | 66.29 | 26.61 | ----- | 92.90 |
| Tinning..... | 73.69 | 46.23 | ----- | 119.92 |
| Grading..... | 119.75 | 199.59 | ----- | 319.34 |
| Gas engine..... | 38.80 | 18.75 | ----- | 57.55 |
| Cement work..... | ----- | ----- | 149.60 | 149.60 |
| Miscellaneous..... | ----- | ----- | 3.38 | 3.38 |
| Material drawn by janitor..... | ----- | 5.84 | ----- | 5.84 |
| Total..... | 342.50 | 322.77 | 152.98 | 818.25 |
| <i>Hillsdale School.</i> | | | | |
| Painting..... | 17.68 | 11.18 | ----- | 28.86 |
| Material drawn by janitor..... | ----- | 2.72 | ----- | 2.72 |
| Total..... | 17.68 | 13.90 | ----- | 31.58 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------------|---------|-----------|-----------|----------|
| <i>Ivy City School, No. 100.</i> | | | | |
| Carpentering..... | \$60.98 | \$51.88 | | \$112.86 |
| Painting..... | 19.42 | 11.67 | | 31.09 |
| Tinning..... | 56.13 | 16.71 | | 72.84 |
| Repair of pump..... | 9.50 | 5.00 | | 14.50 |
| Material drawn by janitor..... | | 1.31 | | 1.31 |
| Total..... | 146.03 | 86.57 | | 232.60 |
| <i>Jackson School, No. 69.</i> | | | | |
| Carpentering..... | 131.80 | 204.27 | | 336.07 |
| Painting..... | 34.12 | 16.87 | | 50.99 |
| Tinning..... | 57.88 | 30.63 | | 88.51 |
| Miscellaneous..... | | | \$3.45 | 3.45 |
| Material drawn by janitor..... | | 7.79 | | 7.79 |
| Heating..... | | | 17.21 | 17.21 |
| Total..... | 223.80 | 259.56 | 20.66 | 504.02 |
| <i>Jefferson School, No. 23.</i> | | | | |
| Carpentering..... | 127.62 | 42.54 | | 170.16 |
| Painting..... | 62.18 | 44.42 | | 106.60 |
| Tinning..... | 161.10 | 55.49 | | 219.59 |
| Improving gas system..... | | | 22.52 | 22.52 |
| Steam fitting..... | 40.55 | 13.79 | 87.00 | 141.34 |
| Repairing iron fence..... | 15.00 | 3.00 | | 18.00 |
| Material drawn by janitor..... | | 6.75 | | 6.75 |
| Total..... | 406.45 | 168.99 | 109.52 | 684.96 |
| <i>Johnson School, No. 95.</i> | | | | |
| Carpentering..... | \$3.03 | 110.32 | | 193.35 |
| Painting..... | 27.98 | 20.99 | | 48.97 |
| Tinning..... | 100.60 | 27.99 | | 128.59 |
| Material drawn by janitor..... | | 11.03 | | 11.03 |
| Heating..... | | | 8.91 | 8.91 |
| Total..... | 211.61 | 170.33 | 8.91 | 390.85 |
| <i>Johnson School Annex, No. 21.</i> | | | | |
| Carpentering..... | 96.32 | 48.35 | | 144.67 |
| Painting..... | 34.20 | 17.90 | | 52.10 |
| Tinning..... | 24.76 | 18.70 | | 43.46 |
| Calci nining..... | | | 155.00 | 155.00 |
| Material drawn by janitor..... | | 3.26 | | 3.26 |
| Total..... | 155.28 | 88.21 | 155.00 | 333.49 |
| <i>Jones School, No. 77.</i> | | | | |
| Carpentering..... | 69.63 | 46.43 | | 116.06 |
| Painting..... | 41.48 | 29.56 | | 71.04 |
| Tinning..... | 71.82 | 23.89 | | 101.71 |
| Heating..... | | | 14.08 | 14.08 |
| Total..... | 182.93 | 112.26 | 14.08 | 309.87 |
| <i>Kenilworth School, No. 128.</i> | | | | |
| Carpentering..... | 101.32 | 37.17 | | 138.49 |
| Painting..... | 24.68 | 12.54 | | 37.22 |
| Tinning..... | 37.07 | 24.67 | | 61.74 |
| Calci nining..... | | | 75.00 | 75.00 |
| Repairing well..... | 11.00 | 1.00 | | 12.00 |
| Material drawn by janitor..... | | 3.42 | | 3.42 |
| Heating..... | | | 23.36 | 23.36 |
| Total..... | 174.07 | 78.80 | 93.33 | 351.23 |
| <i>Ketcham School, No. 149.</i> | | | | |
| Carpentering..... | 37.59 | 25.65 | | 63.24 |
| Painting..... | 15.54 | 13.83 | | 29.37 |
| Gas engine..... | 2.23 | | | 2.23 |
| Total..... | 55.36 | 39.48 | | 94.84 |
| <i>Langdon School, No. 108.</i> | | | | |
| Carpentering..... | 67.92 | 44.27 | | 112.91 |
| Painting..... | 33.84 | 14.64 | | 48.48 |
| Tinning..... | 32.26 | 14.64 | | 46.51 |
| Miscellaneous..... | | .77 | | .77 |
| Material drawn by janitor..... | | 1.97 | | 1.97 |
| Heating..... | | | 23.50 | 23.50 |
| Total..... | 134.02 | 75.90 | 23.50 | 233.42 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------------|---------|-----------|-----------|---------|
| <i>Langdon Annex.</i> | | | | |
| Painting..... | \$16.54 | \$11.64 | | \$28.18 |
| Tinning..... | 26.31 | 11.79 | | 38.10 |
| Total..... | 42.85 | 23.43 | | 66.28 |
| <i>Langston School, No. 132.</i> | | | | |
| Carpentering..... | 56.75 | 48.66 | | 105.41 |
| Painting..... | 35.73 | 22.48 | | 58.21 |
| Tinning..... | 43.82 | 11.85 | | 55.67 |
| Gas engine..... | 23.08 | 4.25 | | 27.33 |
| Material drawn by janitor..... | | 4.67 | | 4.67 |
| Heating..... | | | \$4.50 | 4.50 |
| Total..... | 150.38 | 91.91 | 4.50 | 255.79 |
| <i>Lenox School, No. 67.</i> | | | | |
| Carpentering..... | 127.75 | 94.97 | | 222.72 |
| Painting..... | 37.62 | 21.63 | | 58.95 |
| Tinning..... | 35.51 | 17.34 | | 52.85 |
| Repairs, gate and fence..... | 2.50 | .50 | | 3.00 |
| Material drawn by janitor..... | | 6.98 | | 6.98 |
| Heating..... | | | 8.11 | 8.11 |
| Total..... | 203.68 | 140.82 | 8.11 | 352.61 |
| <i>Lincoln School, No. 18.</i> | | | | |
| Carpentering..... | 79.69 | 44.71 | | 124.40 |
| Painting..... | 26.29 | 16.26 | 127.00 | 169.55 |
| Tinning..... | 29.32 | 13.47 | | 42.79 |
| Material drawn by janitor..... | | 14.63 | | 14.63 |
| Steam fitting..... | 9.00 | 1.84 | | 10.84 |
| Heating..... | | | 11.67 | 11.67 |
| Total..... | 144.30 | 90.31 | 133.67 | 373.28 |
| <i>Logan School, No. 90.</i> | | | | |
| Carpentering..... | 112.63 | 106.52 | | 218.55 |
| Painting..... | 31.40 | 15.47 | | 46.87 |
| Tinning..... | 47.30 | 20.36 | | 67.75 |
| Miscellaneous..... | | | 2.30 | 3.30 |
| Material drawn by janitor..... | | 11.63 | | 11.63 |
| Heating..... | | | 10.66 | 10.66 |
| Total..... | 190.82 | 153.33 | 12.96 | 357.16 |
| <i>Lovejoy School, No. 124.</i> | | | | |
| Carpentering..... | 67.13 | 36.72 | | 103.85 |
| Painting..... | 25.54 | 14.42 | 215.00 | 254.96 |
| Tinning..... | 32.32 | 13.45 | | 45.77 |
| Gas engine..... | 26.06 | 19.88 | | 45.94 |
| Calceining..... | | | 65.00 | 65.00 |
| Material drawn by janitor..... | | 6.68 | | 6.68 |
| Heating..... | | | 7.75 | 7.75 |
| Total..... | 151.05 | 91.15 | 287.75 | 529.95 |
| <i>Ludlow School, No. 142.</i> | | | | |
| Carpentering..... | 74.59 | 27.83 | | 102.42 |
| Painting..... | 21.94 | 17.79 | | 47.73 |
| Tinning..... | 24.82 | 13.45 | | 38.27 |
| Gas engine..... | 9.19 | 7.27 | | 16.46 |
| Repairing fence..... | 2.25 | 2.00 | | 4.25 |
| Material drawn by janitor..... | | 13.80 | | 13.80 |
| Heating..... | | | 2.48 | 2.48 |
| Total..... | 140.79 | 82.14 | 2.48 | 225.41 |
| <i>M Street High School, No. 82.</i> | | | | |
| Carpentering..... | 211.39 | 62.23 | | 273.62 |
| Painting..... | 127.29 | 54.32 | | 181.61 |
| Tinning..... | 37.94 | 15.87 | | 53.81 |
| Material drawn by janitor..... | | 12.60 | | 12.60 |
| Steam fitting..... | 23.16 | 11.53 | 11.83 | 46.52 |
| Heating..... | | | 46.70 | 46.70 |
| Total..... | 399.78 | 156.55 | 58.53 | 614.86 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------------|---------|-----------|-----------|----------|
| <i>Ivy City School, No. 100.</i> | | | | |
| Carpentering..... | \$60.98 | \$51.88 | ..... | \$112.86 |
| Painting..... | 19.42 | 11.67 | ..... | 31.09 |
| Tinning..... | 56.13 | 16.71 | ..... | 72.84 |
| Repair of pump..... | 9.50 | 5.00 | ..... | 14.50 |
| Material drawn by janitor..... | ..... | 1.31 | ..... | 1.31 |
| Total..... | 146.03 | 86.57 | ..... | 232.60 |
| <i>Jackson School, No. 69.</i> | | | | |
| Carpentering..... | 131.80 | 204.27 | ..... | 336.07 |
| Painting..... | 34.12 | 16.87 | ..... | 50.99 |
| Tinning..... | 57.88 | 30.63 | ..... | 88.51 |
| Miscellaneous..... | ..... | ..... | \$3.45 | 3.45 |
| Material drawn by janitor..... | ..... | 7.79 | ..... | 7.79 |
| Heating..... | ..... | ..... | 17.21 | 17.21 |
| Total..... | 223.80 | 259.56 | 20.66 | 504.02 |
| <i>Jefferson School, No. 23.</i> | | | | |
| Carpentering..... | 127.62 | 42.54 | ..... | 170.16 |
| Painting..... | 62.18 | 44.42 | ..... | 106.60 |
| Tinning..... | 161.10 | 58.49 | ..... | 219.59 |
| Improving gas system..... | ..... | ..... | 22.52 | 22.52 |
| Steelfitting..... | 40.55 | 13.79 | 87.00 | 141.34 |
| Repairing iron fence..... | 15.00 | 3.00 | ..... | 18.00 |
| Material drawn by janitor..... | ..... | 6.75 | ..... | 6.75 |
| Total..... | 406.45 | 168.99 | 109.52 | 684.96 |
| <i>Johnson School, No. 95.</i> | | | | |
| Carpentering..... | \$3.03 | 110.32 | ..... | 193.35 |
| Painting..... | 27.98 | 20.99 | ..... | 48.97 |
| Tinning..... | 100.00 | 27.99 | ..... | 128.59 |
| Material drawn by janitor..... | ..... | 11.03 | ..... | 11.03 |
| Heating..... | ..... | ..... | 8.91 | 8.91 |
| Total..... | 211.61 | 170.33 | 8.91 | 390.85 |
| <i>Johnson School Annex, No. 21.</i> | | | | |
| Carpentering..... | 96.32 | 48.35 | ..... | 144.67 |
| Painting..... | 34.20 | 17.90 | ..... | 52.10 |
| Tinning..... | 24.76 | 18.70 | ..... | 43.46 |
| Calclining..... | ..... | ..... | 155.00 | 155.00 |
| Material drawn by janitor..... | ..... | 3.26 | ..... | 3.26 |
| Total..... | 155.28 | 88.21 | 155.00 | 398.49 |
| <i>Jones School, No. 77.</i> | | | | |
| Carpentering..... | 69.63 | 46.43 | ..... | 116.06 |
| Painting..... | 41.48 | 29.56 | ..... | 71.04 |
| Tinning..... | 71.82 | 29.89 | ..... | 101.71 |
| Heating..... | ..... | ..... | 14.08 | 14.08 |
| Total..... | 182.93 | 112.25 | 14.08 | 309.87 |
| <i>Kenilworth School, No. 128.</i> | | | | |
| Carpentering..... | 101.32 | 37.17 | ..... | 138.49 |
| Painting..... | 24.08 | 12.54 | ..... | 37.22 |
| Tinning..... | 37.07 | 24.67 | ..... | 61.74 |
| Calclining..... | ..... | ..... | 75.00 | 75.00 |
| Repairing well..... | 11.00 | 1.00 | ..... | 12.00 |
| Material drawn by janitor..... | ..... | 3.42 | ..... | 3.42 |
| Heating..... | ..... | ..... | 23.36 | 23.36 |
| Total..... | 174.07 | 78.80 | 93.33 | 351.23 |
| <i>Ketcham School, No. 149.</i> | | | | |
| Carpentering..... | 37.59 | 25.65 | ..... | 63.24 |
| Painting..... | 15.54 | 13.83 | ..... | 29.37 |
| Gas engine..... | 2.23 | ..... | ..... | 2.23 |
| Total..... | 55.36 | 39.48 | ..... | 94.84 |
| <i>Langdon School, No. 108.</i> | | | | |
| Carpentering..... | 67.92 | 44.27 | ..... | 112.91 |
| Painting..... | 33.84 | 14.64 | ..... | 48.48 |
| Tinning..... | 32.26 | 14.64 | ..... | 46.51 |
| Miscellaneous..... | ..... | ..... | ..... | ..... |
| Material drawn by janitor..... | ..... | ..... | ..... | ..... |
| Heating..... | ..... | 1.97 | ..... | 1.97 |
| Total..... | 134.02 | 75.90 | 23.50 | 233.42 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------------|---------|-----------|-----------|---------|
| <i>Langdon Annex.</i> | | | | |
| Painting..... | \$16.54 | \$11.04 | | \$28.18 |
| Tinning..... | 26.31 | 11.79 | | 38.10 |
| Total..... | 42.85 | 23.43 | | 66.28 |
| <i>Langston School, No. 132.</i> | | | | |
| Carpentering..... | 56.75 | 48.06 | | 105.41 |
| Painting..... | 35.73 | 22.48 | | 58.21 |
| Tinning..... | 43.82 | 11.85 | | 55.67 |
| Gas engine..... | 23.08 | 4.25 | | 27.33 |
| Material drawn by janitor..... | | 4.67 | | 4.67 |
| Heating..... | | | \$4.50 | 4.50 |
| Total..... | 150.38 | 91.91 | 4.50 | 255.79 |
| <i>Lenox School, No. 67.</i> | | | | |
| Carpentering..... | 127.75 | 94.97 | | 222.72 |
| Painting..... | 37.92 | 21.03 | | 58.95 |
| Tinning..... | 35.51 | 17.34 | | 52.85 |
| Repairs, gate and fence..... | 2.50 | .50 | | 3.00 |
| Material drawn by janitor..... | | 6.98 | | 6.98 |
| Heating..... | | | 8.11 | 8.11 |
| Total..... | 203.68 | 140.82 | 8.11 | 352.61 |
| <i>Lincoln School, No. 18.</i> | | | | |
| Carpentering..... | 79.69 | 44.71 | | 124.40 |
| Painting..... | 26.29 | 16.26 | 127.00 | 169.55 |
| Tinning..... | 29.32 | 13.47 | | 42.79 |
| Material drawn by janitor..... | | 14.03 | | 14.03 |
| Steam fitting..... | 9.00 | 1.84 | | 10.84 |
| Heating..... | | | 11.07 | 11.07 |
| Total..... | 144.30 | 90.31 | 133.07 | 373.28 |
| <i>Logan School, No. 90.</i> | | | | |
| Carpentering..... | 112.03 | 106.52 | | 218.55 |
| Painting..... | 31.40 | 15.47 | | 46.87 |
| Tinning..... | 47.30 | 20.36 | | 67.75 |
| Miscellaneous..... | | | 2.30 | 3.30 |
| Material drawn by janitor..... | | 11.03 | | 11.03 |
| Heating..... | | | 10.06 | 10.06 |
| Total..... | 190.82 | 153.33 | 12.96 | 357.16 |
| <i>Lovejoy School, No. 124.</i> | | | | |
| Carpentering..... | 67.13 | 36.72 | | 103.85 |
| Painting..... | 25.54 | 14.42 | 215.00 | 254.96 |
| Tinning..... | 32.32 | 13.45 | | 45.77 |
| Gas engine..... | 26.06 | 19.88 | | 45.94 |
| Calclmning..... | | | 5.00 | 65.00 |
| Material drawn by janitor..... | | 6.68 | | 6.68 |
| Heating..... | | | 7.75 | 7.75 |
| Total..... | 151.05 | 91.15 | 287.75 | 529.95 |
| <i>Ludlow School, No. 142.</i> | | | | |
| Carpentering..... | 74.59 | 27.83 | | 102.42 |
| Painting..... | 23.94 | 17.79 | | 47.73 |
| Tinning..... | 24.82 | 13.45 | | 38.27 |
| Gas engine..... | 9.19 | 7.27 | | 16.46 |
| Repairing fence..... | 2.25 | 2.00 | | 4.25 |
| Material drawn by janitor..... | | 13.80 | | 13.80 |
| Heating..... | | | 2.48 | 2.48 |
| Total..... | 140.79 | 82.14 | 2.48 | 225.41 |
| <i>M Street High School, No. 82.</i> | | | | |
| Carpentering..... | 211.39 | 62.23 | | 273.62 |
| Painting..... | 127.29 | 54.32 | | 181.61 |
| Tinning..... | 37.94 | 15.87 | | 53.81 |
| Material drawn by janitor..... | | 12.60 | | 12.60 |
| Steam fitting..... | 23.16 | 11.53 | 11.83 | 46.52 |
| Heating..... | | | 46.70 | 46.70 |
| Total..... | 390.78 | 156.55 | 58.53 | 614.86 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|-------------------------------------|---------|-----------|-----------|---------|
| <i>Madison School, No. 71.</i> | | | | |
| Carpentering..... | \$75.99 | \$21.47 | | \$97.46 |
| Painting..... | 152.12 | 42.93 | | 195.05 |
| Tinning..... | 50.56 | 16.44 | | 67.00 |
| Material drawn by janitor..... | | 10.11 | | 10.11 |
| Heating..... | | | \$117.65 | 117.65 |
| Total..... | 278.67 | 90.95 | 117.65 | 487.27 |
| <i>Magruder School, No. 62.</i> | | | | |
| Carpentering..... | 85.76 | 52.62 | | 138.38 |
| Painting..... | 52.42 | 34.47 | | 91.89 |
| Tinning..... | 34.06 | 19.53 | | 53.59 |
| Miscellaneous..... | | | 3.45 | 3.45 |
| Material drawn by janitor..... | | 4.70 | | 4.70 |
| Heating..... | | | 46.68 | 46.68 |
| Total..... | 172.24 | 116.32 | 50.13 | 338.69 |
| <i>Maury School, No. 55.</i> | | | | |
| Carpentering..... | 110.92 | 111.36 | | 222.28 |
| Painting..... | 113.36 | 35.07 | | 151.03 |
| Tinning..... | 70.62 | 21.54 | | 92.16 |
| Gas engine..... | 58.83 | 19.84 | | 78.67 |
| Calcuttining..... | | | 63.00 | 63.00 |
| Material drawn by janitor..... | | 19.19 | | 19.19 |
| Heating..... | | 15.48 | | 15.48 |
| Total..... | 355.73 | 223.08 | 63.00 | 641.81 |
| <i>McCormick School, No. 16.</i> | | | | |
| Carpentering..... | 85.13 | 95.63 | | 180.76 |
| Painting..... | 31.11 | 14.86 | | 45.97 |
| Tinning..... | 41.68 | 20.52 | | 62.20 |
| Miscellaneous..... | | | 10.30 | 10.30 |
| Material drawn by janitor..... | | 5.44 | | 5.44 |
| Heating..... | | | 9.30 | 9.30 |
| Total..... | 157.92 | 135.97 | 19.60 | 313.49 |
| <i>McKinley School, No. 130.</i> | | | | |
| Carpentering..... | 94.30 | 61.74 | | 156.04 |
| Painting..... | 22.46 | 13.13 | | 35.59 |
| Material drawn by janitor..... | | 5.44 | | 5.44 |
| Heating..... | | | 80.17 | 80.17 |
| Total..... | 116.76 | 80.31 | 80.17 | 277.24 |
| <i>Military Road School, No. 8.</i> | | | | |
| Carpentering..... | 88.93 | 73.65 | | 162.58 |
| Painting..... | 21.42 | 15.09 | | 41.51 |
| Tinning..... | 25.81 | 10.26 | | 36.07 |
| Calcuttining..... | | | 35.00 | 35.00 |
| Material drawn by janitor..... | | 1.79 | | 1.79 |
| Total..... | 141.16 | 100.79 | 35.00 | 276.95 |
| <i>Monroe School, No. 72.</i> | | | | |
| Carpentering..... | 127.50 | 85.22 | | 212.72 |
| Painting..... | 174.76 | 43.90 | | 218.66 |
| Tinning..... | 31.06 | 16.48 | | 47.54 |
| Calcuttining..... | | | 73.00 | 73.00 |
| Miscellaneous..... | | | 3.45 | 3.45 |
| Material drawn by janitor..... | | 5.63 | | 5.63 |
| Heating..... | | | 45.34 | 45.34 |
| Total..... | 333.32 | 151.23 | 121.79 | 606.34 |
| <i>Montgomery School, No. 140.</i> | | | | |
| Carpentering..... | 46.55 | 38.68 | | 85.23 |
| Painting..... | 28.29 | 18.10 | | 46.39 |
| Tinning..... | 21.06 | 12.55 | | 33.61 |
| Gas engine..... | 16.68 | 4.39 | | 21.07 |
| Material drawn by janitor..... | | 7.50 | | 7.50 |
| Heating..... | | | 12.01 | 12.01 |
| Total..... | 112.58 | 81.22 | 12.01 | 205.81 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|----------------------------------|---------|-----------|-----------|---------|
| <i>Morgan School, No. 125.</i> | | | | |
| Carpentering..... | \$63.72 | \$34.24 | | \$97.96 |
| Painting..... | 30.13 | 16.72 | | 46.85 |
| Tinning..... | 77.81 | 50.84 | | 128.65 |
| Gas engine..... | 80.04 | 33.92 | | 113.96 |
| Material drawn by janitor..... | | 2.72 | | 2.72 |
| Heating..... | | | \$19.38 | 19.38 |
| Total..... | 251.70 | 138.44 | 19.38 | 409.52 |
| <i>Morse School, No. 44.</i> | | | | |
| Carpentering..... | 83.49 | 109.18 | | 192.67 |
| Painting..... | 49.44 | 20.50 | | 69.94 |
| Tinning..... | 53.00 | 15.37 | | 68.37 |
| Gas engine..... | 16.51 | 9.31 | | 25.82 |
| Material drawn by janitor..... | | 2.72 | | 2.72 |
| Heating..... | | | 109.66 | 109.66 |
| Total..... | 202.44 | 157.08 | 109.66 | 469.18 |
| <i>Mott School, No. 43.</i> | | | | |
| Carpentering..... | 43.21 | 27.98 | | 74.19 |
| Painting..... | 34.04 | 17.69 | | 51.73 |
| Tinning..... | 55.93 | 23.75 | | 82.68 |
| Material drawn by janitor..... | | 4.44 | | 4.44 |
| Total..... | 133.18 | 76.86 | | 213.04 |
| <i>Orr School, No. 122.</i> | | | | |
| Carpentering..... | 91.33 | 56.86 | | 148.19 |
| Painting..... | 22.04 | 13.46 | | 35.50 |
| Tinning..... | 68.62 | 28.17 | | 93.79 |
| Material drawn by janitor..... | | 3.04 | | 3.04 |
| Heating..... | | | 3.10 | 3.10 |
| Total..... | 131.99 | 101.53 | 3.10 | 286.62 |
| <i>Patterson School, No. 93.</i> | | | | |
| Carpentering..... | 135.47 | 144.53 | | 280.00 |
| Painting..... | 35.92 | 18.77 | | 54.69 |
| Tinning..... | 222.77 | 157.59 | | 380.36 |
| Grading..... | 18.37 | | | 18.37 |
| Material drawn by janitor..... | | 6.90 | | 6.90 |
| Miscellaneous..... | | | 6.55 | 6.55 |
| Cement pavement..... | | | 90.90 | 90.90 |
| Heating..... | | | 2.71 | 2.71 |
| Total..... | 412.53 | 327.79 | 100.16 | 840.48 |
| <i>Payne School, No. 93.</i> | | | | |
| Carpentering..... | 92.56 | 108.61 | | 201.17 |
| Painting..... | 32.81 | 16.82 | | 49.63 |
| Tinning..... | 82.22 | 33.82 | | 122.04 |
| Gas engine..... | 21.64 | 6.62 | | 28.26 |
| Material drawn by janitor..... | | 3.42 | | 3.42 |
| Heating..... | | | 35.14 | 35.14 |
| Total..... | 229.23 | 175.29 | 35.14 | 439.66 |
| <i>Peabody School, No. 31.</i> | | | | |
| Carpentering..... | 69.34 | 29.69 | | 99.03 |
| Painting..... | 50.62 | 36.37 | | 86.99 |
| Tinning..... | 55.87 | 20.57 | | 76.44 |
| Miscellaneous..... | | | 11.20 | 11.20 |
| Material drawn by janitor..... | | 15.91 | | 15.91 |
| Steam fitting..... | 9.00 | .69 | | 9.69 |
| Total..... | 184.83 | 103.23 | 11.20 | 299.26 |
| <i>Petworth School, No. 131.</i> | | | | |
| Carpentering..... | 55.27 | 27.67 | | 82.94 |
| Painting..... | 27.58 | 14.78 | | 42.36 |
| Tinning..... | 55.12 | 14.89 | | 70.01 |
| Gas engine..... | 6.47 | 1.75 | | 8.22 |
| Material drawn by janitor..... | | 7.21 | | 7.21 |
| Heating..... | | | 20.93 | 20.93 |
| Total..... | 144.44 | 66.30 | 20.93 | 231.67 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|----------------------------------|----------|-----------|-----------|----------|
| <i>Phelps School, No. 57.</i> | | | | |
| Carpentering..... | \$110.89 | \$110.93 | ..... | \$221.82 |
| Painting..... | 31.05 | 16.18 | ..... | 47.23 |
| Tinning..... | 65.58 | 22.71 | ..... | 98.29 |
| Material drawn by janitor..... | ..... | 7.07 | ..... | 7.07 |
| Heating..... | ..... | ..... | \$8.43 | 8.43 |
| Total..... | 207.52 | 156.89 | 8.43 | 382.84 |
| <i>Phillips School, No. 81.</i> | | | | |
| Carpentering..... | 70.32 | 133.16 | ..... | 203.48 |
| Painting..... | 37.86 | 18.59 | ..... | 56.45 |
| Tinning..... | 105.19 | 22.56 | ..... | 127.75 |
| Miscellaneous..... | ..... | ..... | 4.60 | 4.60 |
| Material drawn by janitor..... | ..... | 4.88 | ..... | 4.88 |
| Heating..... | ..... | ..... | 9.68 | 9.68 |
| Total..... | 213.37 | 179.19 | 14.28 | 406.84 |
| <i>Pierce School, No. 94.</i> | | | | |
| Carpentering..... | 89.79 | 47.55 | ..... | 137.34 |
| Painting..... | 23.68 | 16.18 | ..... | 39.86 |
| Tinning..... | 33.68 | 12.87 | ..... | 46.55 |
| Miscellaneous..... | ..... | ..... | 3.05 | 3.05 |
| Material drawn by janitor..... | ..... | 9.29 | ..... | 9.29 |
| Heating..... | ..... | ..... | 189.00 | 189.00 |
| Total..... | 147.15 | 85.89 | 192.05 | 425.09 |
| <i>Polk School, No. 86.</i> | | | | |
| Carpentering..... | 122.27 | 108.50 | ..... | 230.77 |
| Painting..... | 37.36 | 24.51 | ..... | 61.87 |
| Tinning..... | 26.56 | 13.02 | ..... | 39.58 |
| Miscellaneous..... | ..... | ..... | 2.30 | 2.30 |
| Material drawn by janitor..... | ..... | 10.85 | ..... | 10.85 |
| Heating..... | ..... | ..... | 2.32 | 2.32 |
| Total..... | 186.19 | 156.88 | 4.62 | 347.69 |
| <i>Potomac School, No. 17.</i> | | | | |
| Carpentering..... | 142.48 | 65.02 | ..... | 207.50 |
| Painting..... | 36.86 | 22.15 | ..... | 59.01 |
| Tinning..... | 103.12 | 28.78 | ..... | 131.90 |
| Material drawn by janitor..... | ..... | 1.51 | ..... | 1.51 |
| Total..... | 282.46 | 117.46 | ..... | 399.92 |
| <i>Randall School, No. 28.</i> | | | | |
| Carpentering..... | 233.27 | 206.60 | ..... | 439.87 |
| Painting..... | 96.50 | 25.40 | ..... | 121.96 |
| Tinning..... | 63.75 | 34.79 | ..... | 98.54 |
| Grading and surfacing..... | 11.00 | 44.89 | ..... | 55.89 |
| Calceining..... | ..... | ..... | 100.00 | 100.00 |
| Improving gas system..... | ..... | ..... | 65.00 | 65.00 |
| Material drawn by janitor..... | ..... | 6.02 | ..... | 6.02 |
| Heating..... | ..... | ..... | 66.26 | 66.26 |
| Total..... | 404.58 | 317.70 | 231.26 | 953.54 |
| <i>Reno School, No. 139.</i> | | | | |
| Carpentering..... | 86.48 | 84.82 | ..... | 171.30 |
| Painting..... | 80.33 | 14.35 | ..... | 94.68 |
| Tinning..... | 42.12 | 20.66 | ..... | 62.68 |
| Calceining..... | ..... | ..... | 45.00 | 45.00 |
| Material drawn by janitor..... | ..... | 3.96 | ..... | 3.96 |
| Heating..... | ..... | ..... | 30.23 | 30.23 |
| Total..... | 208.93 | 123.69 | 75.23 | 407.85 |
| <i>Reservoir School, No 110.</i> | | | | |
| Carpentering..... | 129.49 | 70.25 | ..... | 199.74 |
| Painting..... | 30.92 | 14.24 | ..... | 45.16 |
| Tinning..... | 25.06 | 11.51 | ..... | 36.57 |
| Material drawn by janitor..... | ..... | 2.01 | ..... | 2.01 |
| Heating..... | ..... | ..... | 46.75 | 46.75 |
| Total..... | 185.47 | 98.01 | 46.75 | 330.23 |

Repairs and improvements to school buildings and grounds, 1903—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|----------------------------------|---------|-----------|-----------|----------|
| <i>Ross School, No. 146.</i> | | | | |
| Carpentering..... | \$72.24 | \$36.80 | ..... | \$109.04 |
| Painting..... | 32.29 | 25.20 | ..... | 57.49 |
| Tinning..... | 122.67 | 28.00 | ..... | 150.67 |
| Grading and surfacing..... | 60.03 | 124.69 | ..... | 185.32 |
| Material drawn by janitor..... | ..... | 4.80 | ..... | 4.80 |
| Heating..... | ..... | ..... | \$14.73 | 14.73 |
| Total..... | 287.83 | 219.49 | 14.73 | 522.05 |
| <i>Seaton School, No. 22.</i> | | | | |
| Carpentering..... | 88.38 | 56.59 | ..... | 144.97 |
| Painting..... | 67.06 | 31.12 | ..... | 98.18 |
| Tinning..... | 47.81 | 15.55 | ..... | 63.36 |
| Grading ground..... | 1.14 | ..... | ..... | 1.14 |
| Material drawn by janitor..... | ..... | 6.84 | ..... | 6.84 |
| Steam fitting..... | 19.00 | 9.54 | ..... | 28.54 |
| Heating..... | ..... | ..... | 2.57 | 2.57 |
| Total..... | 223.39 | 119.64 | 2.57 | 345.60 |
| <i>Simmons School, No. 134.</i> | | | | |
| Carpentering..... | 43.59 | 27.17 | ..... | 70.76 |
| Painting..... | 29.04 | 16.39 | ..... | 45.43 |
| Tinning..... | 43.25 | 13.85 | ..... | 57.10 |
| Gas engine..... | 10.37 | 4.30 | ..... | 14.67 |
| Calclmining..... | ..... | ..... | 63.00 | 63.00 |
| Material drawn by janitor..... | ..... | 7.74 | ..... | 7.74 |
| Heating..... | ..... | ..... | 19.76 | 19.76 |
| Total..... | 126.25 | 69.45 | 82.76 | 278.46 |
| <i>Slater School, No. 10.</i> | | | | |
| Carpentering..... | 103.11 | 125.00 | ..... | 228.11 |
| Painting..... | 38.31 | 16.67 | ..... | 54.98 |
| Tinning..... | 56.93 | 18.94 | ..... | 75.87 |
| Miscellaneous..... | ..... | ..... | 3.45 | 3.45 |
| Material drawn by janitor..... | ..... | 5.71 | ..... | 5.71 |
| Heating..... | ..... | ..... | 18.82 | 18.82 |
| Total..... | 198.35 | 166.32 | 22.27 | 386.94 |
| <i>Smallwood School, No. 64.</i> | | | | |
| Carpentering..... | 226.37 | 95.02 | ..... | 321.39 |
| Painting..... | 38.71 | 22.07 | ..... | 60.78 |
| Tinning..... | 47.87 | 28.32 | ..... | 76.19 |
| Miscellaneous..... | ..... | ..... | 3.45 | 3.45 |
| Material drawn by janitor..... | ..... | 5.04 | ..... | 6.04 |
| Heating..... | ..... | ..... | 128.00 | 128.00 |
| Total..... | 322.95 | 151.45 | 131.45 | 595.85 |
| <i>Stanton School, No. 133.</i> | | | | |
| Carpentering..... | 75.90 | 13.03 | ..... | 138.93 |
| Painting..... | 26.24 | 14.33 | ..... | 40.57 |
| Tinning..... | 57.87 | 15.22 | ..... | 73.09 |
| Material drawn by janitor..... | ..... | 5.66 | ..... | 5.66 |
| Heating..... | ..... | ..... | 43.56 | 43.56 |
| Total..... | 160.01 | 98.24 | 43.56 | 301.81 |
| <i>Stevens School, No. 37.</i> | | | | |
| Carpentering..... | 238.91 | 296.91 | ..... | 535.82 |
| Painting..... | 94.75 | 47.47 | ..... | 142.22 |
| Tinning..... | 32.81 | 15.45 | ..... | 48.26 |
| Miscellaneous..... | ..... | ..... | 9.90 | 9.90 |
| Material drawn by janitor..... | ..... | 32.58 | ..... | 32.58 |
| Heating..... | ..... | ..... | 46.70 | 46.70 |
| Steam fitting..... | 4.00 | 2.97 | 4.65 | 11.62 |
| Total..... | 370.47 | 395.38 | 61.25 | 827.10 |
| <i>Sumner School, No. 19.</i> | | | | |
| Carpentering..... | 129.07 | 55.92 | ..... | 184.99 |
| Painting..... | 44.65 | 29.55 | ..... | 74.20 |
| Tinning..... | 84.24 | 29.77 | ..... | 114.01 |
| Repairing fence..... | 5.00 | 2.00 | ..... | 7.00 |
| Steam fitting..... | 9.00 | 2.00 | 2.00 | 13.00 |
| Material drawn by janitor..... | ..... | 16.17 | ..... | 16.17 |
| Total..... | 271.96 | 135.41 | 2.00 | 409.37 |

Repairs and improvements to school buildings and grounds, 1903—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|----------------------------------|---------|-----------|-----------|----------|
| <i>Syphax School, No. 126.</i> | | | | |
| Carpentering..... | \$63 20 | \$53.52 | ..... | \$116.72 |
| Painting..... | 137.54 | 28.35 | ..... | 165.89 |
| Tinning..... | 31.75 | 11.93 | ..... | 43.68 |
| Calcimining..... | ..... | ..... | \$65.00 | 65.00 |
| Repair of pump..... | 9.00 | 9.40 | ..... | 18.40 |
| Material drawn by janitor..... | ..... | 2.72 | ..... | 2.72 |
| Boiler and engine..... | ..... | ..... | 225.50 | 225.50 |
| Total..... | 241.49 | 105.92 | 290.50 | 637.91 |
| <i>Takoma School, No. 118.</i> | | | | |
| Carpentering..... | 53.01 | 25.67 | ..... | 78.68 |
| Painting..... | 27.18 | 18.65 | ..... | 45.83 |
| Tinning..... | 53.61 | 20.93 | ..... | 74.54 |
| Gas engine..... | 28.06 | 11.41 | ..... | 39.47 |
| Calcimining..... | ..... | ..... | 75.00 | 75.00 |
| Material drawn by janitor..... | ..... | 3.02 | ..... | 3.02 |
| Heating..... | ..... | ..... | 20.93 | 20.93 |
| Total..... | 161.86 | 79.68 | 95.93 | 337.47 |
| <i>Taylor School, No. 88.</i> | | | | |
| Carpentering..... | 100.64 | 79.08 | ..... | 179.72 |
| Painting..... | 171.04 | 42.07 | ..... | 213.11 |
| Tinning..... | 62.96 | 19.77 | ..... | 82.73 |
| Calcimining..... | ..... | ..... | 59.00 | 59.00 |
| Material drawn by janitor..... | ..... | 6.95 | ..... | 6.95 |
| Miscellaneous..... | ..... | ..... | 2.30 | 2.30 |
| Heating..... | ..... | ..... | 2.88 | 3.88 |
| Total..... | 334.64 | 147.87 | 65.18 | 547.69 |
| <i>Tenley School, No. 102.</i> | | | | |
| Carpentering..... | 134.98 | 96.10 | ..... | 231.08 |
| Painting..... | 39.68 | 21.49 | ..... | 61.17 |
| Tinning..... | 54.69 | 10.26 | ..... | 64.95 |
| Calcimining..... | ..... | ..... | 75.00 | 75.00 |
| Material drawn by janitor..... | ..... | 13.67 | ..... | 13.67 |
| Steamfitting..... | 7.63 | 3.45 | ..... | 11.08 |
| Total..... | 236.98 | 144.97 | 75.00 | 456.95 |
| <i>Tenley School Annex.</i> | | | | |
| Carpentering..... | 36.59 | 19.63 | ..... | 56.22 |
| Painting..... | 16.53 | 10.48 | ..... | 27.01 |
| Total..... | 53.12 | 30.11 | ..... | 83.23 |
| <i>Thomson School, No. 29.</i> | | | | |
| Carpentering..... | 259.89 | 184.61 | ..... | 444.50 |
| Painting..... | 102.32 | 29.66 | ..... | 131.98 |
| Tinning..... | 34.81 | 17.50 | ..... | 52.31 |
| Calcimining..... | ..... | ..... | 50.00 | 50.00 |
| Material drawn by janitor..... | ..... | 1.83 | ..... | 1.83 |
| Heating..... | ..... | ..... | 136.50 | 136.50 |
| Total..... | 397.02 | 233.60 | 216.50 | 847.12 |
| <i>Threlkeld School, No. 14.</i> | | | | |
| Carpentering..... | 76.07 | 59.81 | ..... | 135.88 |
| Painting..... | 111.03 | 38.66 | ..... | 149.69 |
| Tinning..... | 34.68 | 18.92 | ..... | 53.60 |
| Material drawn by janitor..... | ..... | 2.33 | ..... | 2.33 |
| Total..... | 221.78 | 119.72 | ..... | 341.50 |
| <i>Toner School, No. 114.</i> | | | | |
| Carpentering..... | 47.09 | 22.44 | ..... | 69.53 |
| Painting..... | 39.62 | 21.87 | 170.00 | 231.49 |
| Tinning..... | 20.74 | 11.10 | ..... | 31.84 |
| Gas engine..... | 61.44 | 29.29 | ..... | 90.73 |
| Material drawn by janitor..... | ..... | 5.89 | ..... | 5.89 |
| Heating..... | ..... | ..... | 28.60 | 28.60 |
| Total..... | 168.89 | 90.59 | 198.60 | 458.08 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--|----------|-----------|-----------|----------|
| <i>Towers School, No. 59.</i> | | | | |
| Carpentering..... | \$117.38 | \$125.61 | ..... | \$242.99 |
| Painting..... | 48.52 | 24.19 | ..... | 72.71 |
| Tinning..... | 92.31 | 21.18 | ..... | 113.49 |
| Repair of fence..... | 2.25 | 1.25 | ..... | 3.50 |
| Material drawn by janitor..... | ..... | 7.94 | ..... | 7.94 |
| Heating..... | ..... | ..... | \$89.90 | 89.90 |
| Total..... | 260.46 | 180.17 | 89.90 | 530.53 |
| <i>Twining School, No. 45.</i> | | | | |
| Carpentering..... | 60.97 | 20.57 | ..... | 81.54 |
| Painting..... | 24.53 | 17.62 | ..... | 42.15 |
| Tinning..... | 47.06 | 22.01 | ..... | 69.07 |
| Gas engine..... | 9.38 | 5.56 | ..... | 14.94 |
| Material drawn by janitor..... | ..... | 5.37 | ..... | 5.37 |
| Heating..... | ..... | ..... | 19.38 | 19.38 |
| Total..... | 141.94 | 71.13 | 19.38 | 232.45 |
| <i>Tyler School, No. 43.</i> | | | | |
| Carpentering..... | 118.86 | 134.99 | ..... | 253.85 |
| Painting..... | 174.61 | 34.51 | ..... | 209.12 |
| Tinning..... | 64.56 | 22.48 | ..... | 87.04 |
| Calcimining..... | ..... | ..... | 71.00 | 71.00 |
| Material drawn by janitor..... | ..... | 12.64 | ..... | 12.64 |
| Heating..... | ..... | ..... | 47.90 | 47.90 |
| Total..... | 358.03 | 204.62 | 118.90 | 681.55 |
| <i>Van Buren School, No. 87.</i> | | | | |
| Carpentering..... | 61.44 | 27.69 | ..... | 89.13 |
| Painting..... | 146.83 | 32.05 | ..... | 178.88 |
| Tinning..... | 53.81 | 15.78 | ..... | 69.59 |
| Material drawn by janitor..... | ..... | 8.50 | ..... | 8.50 |
| Calcimining..... | ..... | ..... | 65.00 | 65.00 |
| Miscellaneous..... | ..... | ..... | 5.00 | 5.00 |
| Total..... | 262.08 | 84.02 | 70.00 | 416.10 |
| <i>Van Buren School Annex, No. 28.</i> | | | | |
| Carpentering..... | 61.42 | 27.71 | ..... | 89.13 |
| Painting..... | 93.78 | 42.01 | ..... | 135.79 |
| Tinning..... | 35.93 | 12.59 | ..... | 48.52 |
| Miscellaneous..... | ..... | ..... | 2.00 | 2.00 |
| Material drawn by janitor..... | ..... | 2.72 | ..... | 2.72 |
| Total..... | 191.13 | 85.03 | 2.00 | 278.16 |
| <i>Wallach School, No. 4.</i> | | | | |
| Carpentering..... | 480.50 | 345.61 | ..... | 826.11 |
| Painting..... | 49.25 | 22.90 | ..... | 72.15 |
| Tinning..... | 87.37 | 24.54 | ..... | 111.91 |
| Material drawn by janitor..... | ..... | 26.51 | ..... | 26.51 |
| Heating..... | ..... | ..... | 6.01 | 6.01 |
| Steamfitting..... | .50 | .01 | ..... | .51 |
| Total..... | 617.62 | 419.57 | 6.01 | 1,043.20 |
| <i>Webb School, No. 121.</i> | | | | |
| Carpentering..... | 37.96 | 21.51 | ..... | 59.47 |
| Painting..... | 67.35 | 25.43 | ..... | 92.78 |
| Tinning..... | 50.82 | 14.34 | ..... | 65.16 |
| Grading and surfacing ground..... | 72.37 | 27.24 | ..... | 99.61 |
| Gas engine..... | 11.31 | 1.96 | ..... | 13.27 |
| Miscellaneous..... | ..... | 11.18 | ..... | 11.18 |
| Steamfitting..... | 1.50 | ..... | ..... | 1.50 |
| Heating..... | ..... | ..... | 4.65 | 4.65 |
| Total..... | 241.31 | 101.66 | 4.65 | 347.62 |
| <i>Webster School, No. 51.</i> | | | | |
| Carpentering..... | 107.42 | 127.02 | ..... | 234.44 |
| Painting..... | 160.78 | 45.61 | ..... | 206.39 |
| Tinning..... | 35.50 | 14.85 | ..... | 50.35 |
| Material drawn by janitor..... | ..... | 5.81 | ..... | 5.81 |
| Steam fitting..... | 18.88 | 16.24 | ..... | 35.12 |
| Total..... | 322.58 | 209.53 | ..... | 532.11 |

Repairs and improvements to school buildings and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------------|---------|-----------|-----------|----------|
| <i>Weightman School, No. 54.</i> | | | | |
| Carpentering..... | \$74.07 | \$111.41 | ..... | \$186.48 |
| Painting..... | 53.44 | 24.10 | ..... | 83.94 |
| Tinning..... | 44.50 | 19.19 | ..... | 64.19 |
| Material drawn by janitor..... | ..... | 6.59 | ..... | 6.39 |
| Heating..... | ..... | ..... | \$131.75 | 131.75 |
| Total..... | 179.01 | 161.99 | 131.75 | 472.75 |
| <i>Western High School, No. 117.</i> | | | | |
| Carpentering..... | 725.38 | 398.02 | ..... | 1,124.00 |
| Painting..... | 173.82 | 63.08 | ..... | 237.50 |
| Tinning..... | 26.56 | 11.83 | ..... | 38.39 |
| Material drawn by janitor..... | ..... | 14.57 | ..... | 14.57 |
| Steam fitting..... | 36.94 | 28.57 | 455.00 | 520.51 |
| Miscellaneous..... | ..... | ..... | 9.63 | 9.63 |
| Heating..... | ..... | ..... | 100.35 | 100.35 |
| Total..... | 962.70 | 517.27 | 504.98 | 2,044.95 |
| <i>Wheatley School, No. 136.</i> | | | | |
| Carpentering..... | 49.41 | 30.28 | ..... | 79.69 |
| Painting..... | 30.11 | 18.04 | ..... | 48.15 |
| Tinning..... | 45.81 | 17.35 | ..... | 63.16 |
| Grading and surfacing grounds..... | 108.75 | 101.33 | ..... | 270.08 |
| Gas engine..... | 6.09 | ..... | ..... | 6.09 |
| Material drawn by janitor..... | ..... | 14.05 | ..... | 14.05 |
| Cement work..... | ..... | ..... | 101.80 | 101.80 |
| Resetting fence..... | ..... | ..... | 3.13 | 3.13 |
| Heating..... | ..... | ..... | 7.75 | 7.75 |
| Total..... | 300.77 | 181.05 | 112.08 | 593.10 |
| <i>Wilson School, No. 69.</i> | | | | |
| Carpentering..... | 56.51 | 35.71 | ..... | 92.22 |
| Painting..... | 29.59 | 17.48 | ..... | 47.07 |
| Tinning..... | 30.73 | 92.78 | ..... | 123.51 |
| Material drawn by janitor..... | ..... | 7.81 | ..... | 7.81 |
| Miscellaneous..... | ..... | ..... | 3.80 | 3.80 |
| Total..... | 116.83 | 153.78 | 3.80 | 274.41 |
| <i>Woodburn School, No. 101.</i> | | | | |
| Carpentering..... | 56.30 | 40.85 | ..... | 97.15 |
| Painting..... | 22.09 | 12.02 | ..... | 34.71 |
| Tinning..... | 26.86 | 12.46 | ..... | 40.32 |
| Material drawn by janitor..... | ..... | 4.07 | ..... | 4.07 |
| Drilling well (104 feet)..... | ..... | ..... | 45.00 | 45.00 |
| Heating..... | ..... | ..... | 245.00 | 245.00 |
| Total..... | 105.85 | 71.00 | 700.00 | 906.85 |
| <i>Wormley School, No. 49.</i> | | | | |
| Carpentering..... | 57.50 | 236.93 | ..... | 294.43 |
| Painting..... | 30.81 | 17.53 | ..... | 48.04 |
| Tinning..... | 21.12 | 11.77 | ..... | 32.89 |
| Gas engine..... | 24.57 | 21.04 | ..... | 46.51 |
| Material drawn by janitor..... | ..... | 4.07 | ..... | 4.07 |
| Calceining..... | ..... | ..... | 55.00 | 55.00 |
| Heating..... | ..... | ..... | 3.10 | 3.10 |
| Total..... | 134.00 | 292.54 | 68.10 | 494.64 |

SUMMARY.

| | |
|----------------------------|-------------|
| Total accounted for..... | \$69,246.27 |
| Horse hire and forage..... | 43.37 |
| Material on hand..... | 28.75 |
| Unexpended..... | 21.61 |
| Total..... | 70,000.00 |

To show that the greatest economy is practiced, I wish to state that on school buildings only $1\frac{1}{2}$ per cent of the valuation of the property (as quoted from the reports of the board of education) was spent in repairs, or \$70,000, on a valuation of \$6,500,000.

Included in the repair work, more than 65,000 feet flooring was laid, 4,300 feet of spouting made and placed on buildings; nearly all of the roofs were repaired and 47 were painted.

During the year a record has been kept of buildings where fire occurred, as follows:
On June 2, 1908, gas in vent stack of urinal of Edmonds School was left burning during the night and was discovered and reported by officer on beat at 11.30 p. m.; no damage.

On December 10, 1907, a portion of rear fence of Jones School was damaged to the extent of \$7 by fire in adjoining wood shed.

On January 15, 1908, a gas stove in teachers' room, second floor of Towers School, was left burning and was reported by member of No. 8 engine house at 10.30 p. m.; no damage to building.

On February 9, 1908, fire damaged two stands in Eastern Market, caused by over-heated stove; damage, \$50.

Repairs and improvements to engine houses and grounds, 1908.

[Appropriation, \$3,000.]

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------|---------|-----------|-----------|---------|
| <i>No. 1 engine house.</i> | | | | |
| Tinning..... | \$27.48 | \$11.60 | ..... | \$39.08 |
| Painting..... | 40.10 | 18.01 | ..... | 58.11 |
| Plumbing..... | 28.56 | 59.28 | ..... | 67.84 |
| Total..... | 96.14 | 68.89 | ..... | 165.03 |
| <i>No. 2 engine house.</i> | | | | |
| Carpentering..... | 62.82 | 66.96 | ..... | 129.78 |
| Painting..... | 10.10 | 1.26 | ..... | 11.36 |
| Tinning..... | 20.60 | 5.89 | ..... | 26.49 |
| Plumbing..... | 14.50 | 6.73 | ..... | 21.23 |
| Total..... | 108.02 | 80.84 | ..... | 188.86 |
| <i>No. 4 engine house.</i> | | | | |
| Carpentering..... | 50.24 | 40.57 | ..... | 90.81 |
| Painting..... | 53.42 | 15.01 | ..... | 68.43 |
| Tinning..... | 48.04 | 15.69 | ..... | 63.73 |
| Material drawn by captain..... | | 2.13 | ..... | 2.13 |
| Plumbing..... | 14.13 | 7.07 | ..... | 21.20 |
| Total..... | 165.83 | 80.47 | ..... | 246.30 |
| <i>No. 5 engine house.</i> | | | | |
| Carpentering..... | 18.60 | 17.95 | ..... | 36.55 |
| Painting..... | 15.16 | 4.99 | ..... | 20.15 |
| Tinning..... | 80.22 | 85.62 | ..... | 165.84 |
| Plumbing..... | 16.47 | 29.15 | ..... | 45.62 |
| Total..... | 130.45 | 137.71 | ..... | 268.16 |
| <i>No. 6 engine house.</i> | | | | |
| Carpentering..... | 23.10 | 10.19 | ..... | 33.49 |
| Painting..... | 45.60 | 12.61 | ..... | 58.21 |
| Tinning..... | 12.60 | 6.59 | ..... | 19.19 |
| Material drawn by captain..... | | 1.08 | ..... | 1.08 |
| Plumbing..... | 10.13 | 5.52 | ..... | 15.45 |
| Total..... | 91.43 | 35.99 | ..... | 127.42 |
| <i>No. 7 engine house.</i> | | | | |
| Carpentering..... | 22.60 | 20.41 | ..... | 43.01 |
| Painting..... | 12.40 | 1.96 | ..... | 14.56 |
| Tinning..... | 34.10 | 24.21 | ..... | 58.31 |
| Plumbing..... | 41.69 | 82.42 | ..... | 124.11 |
| Total..... | 110.99 | 129.00 | ..... | 239.99 |
| <i>No. 8 engine house.</i> | | | | |
| Carpentering..... | 17.85 | 3.27 | ..... | 21.12 |
| Painting..... | 15.85 | 2.90 | ..... | 18.75 |
| Tinning..... | 60.55 | 26.61 | ..... | 86.96 |
| Plumbing..... | 26.45 | 49.76 | ..... | 76.21 |
| Material drawn by captain..... | | 4.31 | ..... | 4.31 |
| Total..... | 120.50 | 86.85 | ..... | 207.35 |

Repairs and improvements to engine houses and grounds, 1903—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------|----------|-----------|-----------|----------|
| <i>No. 9 engine house</i> | | | | |
| Carpentering..... | \$106.85 | \$78.58 | | \$185.43 |
| Painting..... | 23.10 | 3.40 | | 26.50 |
| Tinning..... | 34.60 | 12.02 | | 46.62 |
| Plumbing..... | 53.41 | 63.17 | | 116.58 |
| Material drawn by captain..... | | 5.66 | | 5.66 |
| 2 steel tracks..... | | | \$39.00 | 69.00 |
| Cement work..... | | | 165.00 | 165.00 |
| Rewiring stalls..... | | | 23.00 | 23.00 |
| Miscellaneous..... | | | 2.89 | 2.89 |
| Total..... | 214.95 | 162.83 | 259.89 | 637.68 |
| <i>No. 10 engine house.</i> | | | | |
| Carpentering..... | 57.22 | 77.31 | | 134.53 |
| Painting..... | 15.50 | 4.40 | | 22.70 |
| Tinning..... | 14.10 | 1.75 | | 15.85 |
| Plumbing..... | 29.07 | 44.55 | | 73.62 |
| Cement floor..... | | | 66.00 | 66.00 |
| Total..... | 118.69 | 128.01 | 66.00 | 312.70 |
| <i>No. 11 engine house.</i> | | | | |
| Carpentering..... | 32.58 | 11.87 | | 44.45 |
| Painting..... | 48.54 | 19.24 | | 67.78 |
| Tinning..... | 20.98 | 4.31 | | 25.29 |
| Plumbing..... | 5.00 | 10.16 | | 15.16 |
| Material drawn by captain..... | | .16 | | .16 |
| Total..... | 107.10 | 45.74 | | 152.84 |
| <i>No. 12 engine house.</i> | | | | |
| Carpentering..... | 10.60 | 3.77 | | 14.37 |
| Painting..... | 31.60 | 11.62 | | 43.22 |
| Plumbing..... | 17.65 | 11.24 | | 28.89 |
| Material drawn by captain..... | | .35 | | .35 |
| Total..... | 59.85 | 26.93 | | 86.83 |
| <i>No. 13 engine house.</i> | | | | |
| Carpentering..... | 72.17 | 96.01 | | 168.18 |
| Painting..... | 23.60 | 7.14 | | 30.74 |
| Tinning..... | 55.55 | 11.53 | | 66.68 |
| Plumbing..... | 10.06 | 1.32 | | 11.38 |
| Rewiring stalls..... | 16.10 | 13.50 | | 29.40 |
| Total..... | 177.28 | 129.10 | | 306.38 |
| <i>No. 14 engine house.</i> | | | | |
| Carpentering..... | 15.30 | 9.06 | | 24.36 |
| Painting..... | 56.10 | 17.54 | | 73.64 |
| Tinning..... | 19.79 | 3.85 | | 23.64 |
| Heating..... | | | 7.50 | 7.50 |
| Plumbing..... | 15.48 | 7.64 | | 23.12 |
| Material drawn by captain..... | | 13.78 | | 13.78 |
| Total..... | 106.67 | 51.87 | 7.50 | 166.04 |
| <i>No. 15 engine house.</i> | | | | |
| Carpentering..... | 39.21 | 35.92 | | 75.13 |
| Painting..... | 126.48 | 74.31 | | 200.79 |
| Tinning..... | 47.93 | 14.49 | | 62.47 |
| Plumbing..... | 15.09 | 6.14 | | 21.23 |
| Miscellaneous..... | | | 1.07 | 1.07 |
| Material drawn by captain..... | | .49 | | .49 |
| Heating..... | | | .68 | .68 |
| Total..... | 228.76 | 131.35 | 1.75 | 361.86 |
| <i>No. 16 engine house.</i> | | | | |
| Carpentering..... | 57.23 | 61.16 | | 118.39 |
| Painting..... | 15.60 | 2.89 | | 18.49 |
| Tinning..... | 27.85 | 4.49 | | 32.34 |
| Plumbing..... | 7.44 | 19.59 | | 27.03 |
| Total..... | 108.12 | 88.13 | | 196.25 |

Repairs and improvements to engine houses and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|---|---------|-----------|-----------|---------|
| <i>No. 17 engine house.</i> | | | | |
| Carpentering..... | \$36.37 | \$47.55 | | \$83.92 |
| Painting..... | 16.10 | 2.40 | | 18.50 |
| Tinuing..... | 32.85 | 17.59 | | 50.44 |
| Material drawn by captain..... | | 4.37 | | 4.37 |
| Plumbing..... | 24.81 | 59.76 | | 84.57 |
| Total..... | 110.13 | 131.67 | | 241.80 |
| <i>No. 18 engine house.</i> | | | | |
| Painting..... | 9.60 | .89 | | 10.49 |
| Tinuing..... | 9.97 | 6.41 | | 16.38 |
| Plumbing..... | 16.56 | 3.99 | | 20.55 |
| Material drawn by captain..... | | 37.33 | | 37.33 |
| Grading..... | 62.63 | | | 62.63 |
| Total..... | 98.76 | 48.62 | | 147.38 |
| <i>No. 19 engine house.</i> | | | | |
| Carpentering..... | 14.16 | 6.18 | | 20.34 |
| Painting..... | 9.60 | 1.51 | | 11.11 |
| Tinuing..... | 31.20 | 5.30 | | 36.50 |
| Plumbing..... | 1.31 | .12 | | 1.43 |
| Material drawn by captain..... | | .38 | | .38 |
| Total..... | 56.27 | 13.49 | | 69.76 |
| <i>No. 20 engine house.</i> | | | | |
| Carpentering..... | 12.60 | 15.70 | | 28.30 |
| Painting..... | 39.22 | 11.67 | | 50.89 |
| Tinuing..... | 24.16 | 5.61 | | 29.77 |
| Plumbing..... | 13.50 | 4.26 | | 17.76 |
| Repairing hinge..... | | | \$1.50 | 1.50 |
| Heating..... | | | 7.75 | 7.75 |
| Total..... | 89.48 | 37.24 | 9.25 | 135.97 |
| <i>No. 1 truck house.</i> | | | | |
| Carpentering..... | 23.73 | 20.50 | | 44.23 |
| Painting..... | 10.10 | 1.76 | | 11.86 |
| Tinuing..... | 17.54 | 4.30 | | 21.84 |
| Material drawn by captain..... | | 43.17 | | 43.17 |
| Plumbing..... | 10.50 | 1.77 | | 12.27 |
| Total..... | 61.87 | 71.50 | | 133.37 |
| <i>No. 2 truck house.</i> | | | | |
| Painting..... | 57.24 | 21.87 | | 79.11 |
| Tinuing..... | 58.40 | 18.40 | | 76.80 |
| Plumbing..... | 40.26 | 42.08 | | 82.34 |
| Material drawn by captain..... | | 2.88 | | 2.88 |
| Miscellaneous..... | | | 1.45 | 1.45 |
| Rewiring stalls..... | 15.40 | 4.85 | | 20.25 |
| Total..... | 171.30 | 90.08 | 1.45 | 262.83 |
| <i>No. 3 truck house.</i> | | | | |
| Tinuing..... | 54.98 | 28.25 | | 83.23 |
| Plumbing..... | 36.09 | 73.30 | | 109.39 |
| 3 catches, wiring and resetting cranks..... | | | 38.00 | 38.00 |
| Total..... | 91.07 | 101.55 | 38.00 | 230.62 |
| <i>No. 4 truck house.</i> | | | | |
| Carpentering..... | 41.21 | 20.48 | | 61.69 |
| Painting..... | 9.60 | .85 | | 10.45 |
| Tinuing..... | 10.10 | 1.58 | | 11.68 |
| Miscellaneous..... | | | .80 | .80 |
| Plumbing..... | 31.63 | 32.86 | | 64.49 |
| Material drawn by captain..... | | 13.77 | | 13.77 |
| Total..... | 92.54 | 69.54 | .80 | 162.88 |
| <i>No. 5 truck house.</i> | | | | |
| Painting..... | 22.60 | 2.41 | | 25.01 |
| Plumbing..... | 3.94 | 3.30 | | 7.24 |
| Heating..... | | | 13.10 | 13.10 |
| Total..... | 26.54 | 5.71 | 13.10 | 45.35 |

Repairs and improvements to engine houses and grounds, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------|---------|-----------|-----------|---------|
| <i>No. 6 truck house.</i> | | | | |
| Carpentering..... | \$10.60 | \$6.37 | | \$16.97 |
| Painting..... | 45.04 | 14.42 | | 59.46 |
| Tinning..... | 9.98 | .60 | | 10.58 |
| Plumbing..... | | .49 | | .49 |
| Total..... | 65.62 | 21.88 | | 87.50 |
| <i>No. 7 truck house.</i> | | | | |
| Carpentering..... | 14.98 | 5.12 | | 20.10 |
| Painting..... | 63.00 | 29.91 | | 92.91 |
| Tinning..... | 11.98 | 1.46 | | 13.44 |
| Plumbing..... | 20.50 | 31.09 | | 51.59 |
| Material drawn by captain..... | | 8.87 | | 8.87 |
| Steam fitting..... | .50 | | | .50 |
| Total..... | 110.96 | 76.45 | | 187.41 |
| <i>No. 1 chemical house.</i> | | | | |
| Carpentering..... | 23.57 | 8.37 | | 31.94 |
| Painting..... | 48.82 | 13.41 | | 62.23 |
| Plumbing..... | 3.00 | .66 | | 3.66 |
| 30-foot track..... | | 20.60 | | 20.60 |
| Material drawn by captain..... | | 3.58 | | 3.58 |
| Total..... | 75.39 | 46.62 | | 122.01 |
| <i>No. 5 chemical house.</i> | | | | |
| Carpentering..... | 53.28 | 9.04 | | 62.32 |
| Painting..... | 91.10 | 23.98 | | 115.08 |
| Tinning..... | 20.08 | 3.76 | | 23.84 |
| Material drawn by captain..... | | 4.25 | | 4.25 |
| Pump and well repair..... | | | \$101.00 | 101.00 |
| One 3-way mill..... | | | 234.75 | 234.75 |
| Miscellaneous..... | | | 10.00 | 10.00 |
| Plumbing..... | 25.06 | 43.09 | | 68.15 |
| Total..... | 189.52 | 84.12 | 345.75 | 619.39 |

SUMMARY.

| | |
|----------------------------|------------|
| Total accounted for..... | \$6,109.96 |
| Horse hire and forage..... | 29.92 |
| Material on hand..... | 1,845.82 |
| Unexpended..... | 14.30 |
| Total..... | 8,000.00 |

Care and judgment has been exercised in the expenditure of the foregoing appropriation, as it is only 2.1 per cent of the valuation of this property as appraised by the assessor of the District of Columbia.

During the past year permanent repairs were made to No. 8 engine house by using channel beams for tracks, doing away with wood sleepers, which will considerably reduce expense.

Extensive repairs were made to water supply at chemical No. 5 by installing windmill over well, it being necessary to discontinue the use of the electrical device in order to save repairs.

Considerable plumbing work was necessary in nearly all of the houses to provide hot water for bathing purposes.

Especial attention is invited to condition of the following houses:

No. 1 engine house should be rebuilt so as to provide larger quarters for men and horses.

No. 4 engine house, being old and dilapidated and unfit for the purpose, should be replaced with a modern building.

No. 6 engine house should be enlarged in rear, so that proper provision can be made for apparatus and horses, to accomplish which it will be necessary to purchase additional land.

At No. 16 engine house the condition is similar to No. 6, if not worse.

Repairs to police stations, 1908.

[Appropriations, \$4,750.]

Necessary repairs were made to all of the stations, which are in a fair condition, except the plumbing, which will be given especial attention during the new fiscal year.

| Class of work. | Labor. | Material. | Contract. | Total. |
|---------------------------------|----------|-----------|-----------|----------|
| <i>No. 1 police station.</i> | | | | |
| Carpentering..... | \$230.93 | \$58.02 | | \$288.95 |
| Painting..... | 114.81 | 28.61 | | 143.42 |
| Tinning..... | 125.31 | 44.71 | | 170.02 |
| Plumbing..... | 36.15 | 3.60 | | 39.75 |
| Material drawn by captain..... | | 5.32 | | 5.32 |
| Heating..... | | | \$175.75 | 175.75 |
| Total..... | 507.20 | 140.26 | 175.75 | 823.21 |
| <i>No. 2 police station.</i> | | | | |
| Carpentering..... | 63.19 | 21.62 | | 84.81 |
| Painting..... | 22.19 | .55 | | 22.74 |
| Plumbing..... | 25.41 | 4.11 | | 29.52 |
| Material drawn by captain..... | | .42 | | .42 |
| Desk rail..... | | | 37.50 | 37.50 |
| Heating..... | | | 7.75 | 7.75 |
| Total..... | 110.79 | 26.70 | 45.25 | 182.74 |
| <i>No. 3 police station.</i> | | | | |
| Carpentering..... | 66.09 | 36.18 | | 102.27 |
| Painting..... | 22.81 | 1.00 | | 23.81 |
| Tinning..... | 22.31 | .73 | | 23.04 |
| Plumbing..... | 8.23 | 11.08 | | 19.31 |
| Material drawn by captain..... | | 2.88 | | 2.88 |
| Heating..... | | | 39.00 | 39.00 |
| Total..... | 119.44 | 51.87 | 39.00 | 210.31 |
| <i>No. 4 police station.</i> | | | | |
| Carpentering..... | 121.47 | 5.78 | | 127.25 |
| Painting..... | 71.41 | 26.56 | | 97.97 |
| Tinning..... | 68.56 | 16.59 | | 85.15 |
| Plumbing..... | 67.94 | 60.89 | | 128.83 |
| Material drawn by captain..... | | 13.34 | | 13.34 |
| Heating..... | | | 117.68 | 117.68 |
| Total..... | 329.88 | 123.16 | 117.68 | 570.22 |
| <i>No. 5 police station.</i> | | | | |
| Carpentering..... | 83.89 | 31.69 | | 115.58 |
| Painting..... | 23.81 | 3.26 | | 27.07 |
| Tinning..... | 32.19 | 4.53 | | 36.72 |
| Plumbing..... | 14.57 | 9.44 | | 24.01 |
| Material drawn by captain..... | | 4.49 | | 4.49 |
| Manure pit cover and frame..... | | | 28.00 | 28.00 |
| Heating..... | | | 6.50 | 6.50 |
| Total..... | 154.46 | 53.41 | 34.50 | 242.37 |
| <i>No. 6 police station.</i> | | | | |
| Carpentering..... | 126.97 | 14.71 | | 141.68 |
| Painting..... | 53.81 | 14.10 | | 67.91 |
| Tinning..... | 64.68 | 11.94 | | 76.62 |
| Plumbing..... | 28.62 | 20.46 | | 49.08 |
| Material drawn by captain..... | | 5.65 | | 5.65 |
| Heating..... | | | 111.15 | 111.15 |
| Total..... | 274.08 | 66.86 | 111.15 | 452.09 |
| <i>No. 7 police station.</i> | | | | |
| Carpentering..... | 68.46 | 57.77 | | 126.23 |
| Painting..... | 60.95 | 17.92 | | 78.87 |
| Tinning..... | 25.43 | .46 | | 25.89 |
| Plumbing..... | 10.84 | 13.12 | | 23.96 |
| Removing tree..... | | | 19.80 | 19.80 |
| Miscellaneous..... | 9.00 | 1.26 | | 10.26 |
| Heating..... | | | 15.00 | 15.00 |
| Total..... | 174.68 | 90.53 | 34.80 | 300.01 |

Repairs to police stations, 1908—Continued.

| Class of work. | Labor. | Material. | Contract. | Total. |
|--------------------------------|---------|-----------|-----------|---------|
| <i>No. 8 police station.</i> | | | | |
| Carpentering..... | \$50.51 | \$7.61 | ..... | \$58.12 |
| Painting..... | 24.31 | 3.44 | ..... | 27.75 |
| Tinning..... | 23.56 | 2.68 | ..... | 26.24 |
| Plumbing..... | 29.44 | 10.86 | ..... | 40.30 |
| Material drawn by captain..... | ..... | 4.19 | ..... | 4.19 |
| Heating..... | ..... | ..... | \$35.00 | 35.00 |
| Total..... | 127.82 | 28.78 | 35.00 | 191.60 |
| <i>No. 9 police station.</i> | | | | |
| Carpentering..... | 166.31 | 140.45 | ..... | 306.77 |
| Painting..... | 62.63 | 17.88 | ..... | 80.51 |
| Plumbing..... | 27.56 | 11.81 | ..... | 39.37 |
| Brass desk rail..... | ..... | ..... | 37.50 | 37.50 |
| Material drawn by captain..... | ..... | 3.14 | ..... | 3.14 |
| Heating..... | ..... | ..... | 78.00 | 78.00 |
| Total..... | 256.50 | 173.29 | 115.50 | 545.29 |
| <i>No. 10 police station.</i> | | | | |
| Carpentering..... | 103.41 | 15.40 | ..... | 118.81 |
| Painting..... | 26.95 | 3.79 | ..... | 30.74 |
| Tinning..... | 21.56 | .46 | ..... | 22.02 |
| Plumbing..... | 35.69 | 15.74 | ..... | 51.43 |
| Lumber for rear fence..... | ..... | ..... | 5.00 | 5.00 |
| Heating..... | ..... | ..... | 25.00 | 25.00 |
| Total..... | 187.61 | 35.39 | 30.00 | 253.00 |
| <i>Substation T.</i> | | | | |
| Carpentering..... | 41.15 | 13.21 | ..... | 54.36 |
| Painting..... | 72.95 | 25.12 | ..... | 98.07 |
| Plumbing..... | 2.00 | ..... | ..... | 2.00 |
| Total..... | 116.10 | 38.33 | ..... | 154.43 |
| <i>Harbor precinct.</i> | | | | |
| Carpentering..... | 26.81 | 12.01 | ..... | 38.82 |
| Plumbing..... | 3.50 | .95 | ..... | 4.45 |
| Total..... | 30.31 | 12.96 | ..... | 43.27 |

SUMMARY.

| | |
|----------------------------|------------|
| Total accounted for..... | \$3,968.54 |
| Material on hand..... | 733.59 |
| Horse hire and forage..... | 25.42 |
| Unexpended..... | 22.45 |
| Total..... | 4,750.00 |

The assessed valuation of the police stations is approximately \$251,000, while the appropriation for the repairs to these buildings is only \$4,750, or $1\frac{2}{100}$ per cent. From this comparison it can be readily seen that the expenditure for repairs to stations is very limited.

Repairs to plumbing.

[Appropriation, \$6,000.]

| No. | Name of school. | Labor. | Material. | Total. | No. | Name of school. | Labor. | Material. | Total. |
|-----|-------------------------------------|--------|-----------|--------|-----|----------------------|--------|-----------|--------|
| 27 | Abbot..... | \$4.06 | \$4.05 | \$8.11 | 95 | Johnson..... | \$4.78 | \$0.69 | \$5.47 |
| 65 | Adams..... | 3.97 | 1.39 | 5.36 | 21 | Johnson Annex..... | 26.25 | 9.97 | 36.22 |
| 53 | Addison..... | 14.06 | 7.68 | 21.74 | 77 | Jones..... | 14.85 | .79 | 15.64 |
| 79 | Ambush..... | 5.50 | .74 | 6.24 | 132 | Langston..... | 16.60 | 10.74 | 27.34 |
| 42 | Amidon..... | 13.63 | 6.38 | 20.01 | 67 | Lenox..... | 6.97 | 5.99 | 12.96 |
| 129 | Armstrong Manual Training..... | 60.10 | 27.30 | 87.40 | 18 | Lincoln..... | 34.66 | 4.82 | 39.49 |
| 70 | Arthur..... | 3.16 | 1.77 | 4.93 | 90 | Logan..... | 7.28 | 5.62 | 12.90 |
| 39 | Banneker..... | 9.00 | 3.98 | 12.98 | 124 | Lovejoy..... | 32.66 | 4.13 | 36.79 |
| 78 | Bell..... | 6.00 | 1.08 | 7.08 | 142 | Ludlow..... | 15.26 | 3.34 | 19.60 |
| 66 | Berret..... | 4.60 | 3.06 | 7.66 | 82 | M Street High..... | 35.57 | 8.59 | 44.16 |
| 127 | Birney..... | 37.40 | 16.04 | 53.44 | 71 | Madison..... | 5.00 | 5.96 | 10.96 |
| 50 | Blair..... | 53.74 | 9.85 | 63.59 | 62 | Magruder..... | 4.59 | 3.01 | 7.60 |
| 61 | Blake..... | 20.44 | 4.06 | 24.50 | 55 | Maury..... | 17.52 | 6.68 | 24.20 |
| 145 | Blow..... | 10.00 | .84 | 10.84 | 16 | McCormick..... | 1.81 | .75 | 2.56 |
| 109 | Bowen, A..... | 8.44 | .97 | 9.41 | 130 | McKinley..... | 78.75 | \$3.12 | 161.87 |
| 123 | Bowen, S. J..... | 9.97 | 3.79 | 13.76 | 140 | Montgomery..... | 11.34 | .81 | 12.15 |
| 60 | Bradley..... | 3.00 | .69 | 3.69 | 125 | Morgan..... | 13.00 | 6.79 | 19.79 |
| 46 | Brent..... | 21.67 | 28.79 | 50.46 | 44 | Morse..... | 9.50 | 6.12 | 15.62 |
| 75 | Briggs..... | 5.00 | 3.45 | 8.45 | 40 | Mott..... | 11.03 | 4.90 | 15.93 |
| 104 | Brightwood..... | 47.22 | 35.31 | 82.53 | 122 | Orr..... | 1.00 | .73 | 1.73 |
| 103 | Brookland..... | 24.63 | 15.53 | 40.16 | 93 | Patterson..... | 2.50 | .89 | 3.39 |
| 112 | Bruce..... | 3.56 | 1.49 | 5.05 | 98 | Payne..... | 9.88 | 1.19 | 11.07 |
| 96 | Buchanan..... | 8.28 | 2.12 | 10.40 | 31 | Peabody..... | 22.31 | 4.73 | 27.04 |
| 144 | Business High..... | 28.37 | 76.95 | 105.32 | 131 | Petworth..... | 19.03 | 2.49 | 21.52 |
| 58 | Carbery..... | 13.19 | 13.24 | 26.43 | 57 | Phelps..... | 7.63 | .98 | 8.61 |
| 148 | Cardozo..... | 6.47 | 1.15 | 7.62 | 86 | Polk..... | 2.53 | 1.87 | 4.40 |
| 43 | Central High..... | 355.11 | 193.93 | 549.04 | 17 | Potomac..... | 6.00 | 1.75 | 7.75 |
| 113 | Chevy Chase..... | .56 | .69 | 1.25 | 28 | Randall..... | 36.88 | 13.85 | 50.73 |
| 25 | Conduit Road..... | 5.66 | .69 | 6.35 | 139 | Reno..... | 9.22 | 15.53 | 24.75 |
| 30 | Cook..... | 16.40 | 1.92 | 18.39 | 110 | Reservoir..... | 11.34 | 11.59 | 22.93 |
| 68 | Corcoran..... | 11.59 | 4.21 | 15.80 | 146 | Ross..... | 4.60 | .77 | 5.37 |
| 137 | Cranch..... | 37.09 | 4.56 | 41.65 | 22 | Seaton..... | 52.86 | 12.35 | 65.21 |
| 26 | Curtis..... | 47.51 | 20.73 | 68.24 | 134 | Simmons..... | 18.50 | 1.22 | 19.72 |
| 52 | Dennison..... | 7.60 | 6.57 | 14.17 | 80 | Slater..... | 12.57 | 9.90 | 22.47 |
| 120 | Dent..... | 17.25 | 28.26 | 45.51 | 64 | Smallwood..... | 1.50 | 2.53 | 4.03 |
| 99 | Douglass..... | 1.00 | .69 | 1.69 | 97 | Stevens..... | 40.75 | 32.39 | 73.14 |
| 85 | Eastern High..... | 88.37 | 42.82 | 131.19 | 19 | Sumner..... | 39.50 | 25.83 | 65.33 |
| 116 | Eckington..... | 25.16 | 12.77 | 37.93 | 126 | Syphax..... | 11.28 | 1.81 | 13.09 |
| 135 | Edmonds..... | 28.16 | 22.01 | 50.17 | 118 | Takoma..... | 6.47 | 2.06 | 8.53 |
| 133 | Emery..... | 31.98 | 18.36 | 50.34 | 88 | Taylor..... | 2.66 | 2.54 | 5.20 |
| 32 | Force..... | 31.26 | 19.15 | 50.41 | 102 | Tenley..... | 38.88 | 6.69 | 45.57 |
| 15 | Franklin..... | 131.82 | 106.20 | 238.02 | 29 | Thomson..... | 6.47 | 3.20 | 9.67 |
| 141 | French, B. B., Manual Training..... | 15.69 | 1.33 | 17.02 | 114 | Threlkeld..... | 19.31 | 28.68 | 47.99 |
| 143 | Gage..... | 4.81 | .69 | 5.50 | 114 | Toner..... | 10.69 | 2.30 | 12.99 |
| 36 | Gales..... | 54.56 | 53.12 | 107.68 | 59 | Towers..... | 12.88 | 7.00 | 19.88 |
| 34 | Garnet..... | 28.16 | 13.16 | 41.32 | 45 | Twining..... | 7.85 | 2.53 | 10.38 |
| 76 | Garrison..... | 1.00 | .94 | 1.94 | 83 | Tyler..... | 26.07 | 6.88 | 32.95 |
| 63 | Giddings..... | 3.31 | 1.09 | 4.40 | 87 | Van Buren..... | 3.28 | 1.10 | 4.38 |
| 41 | Grant..... | 69.03 | 87.98 | 157.01 | 38 | Van Buren Annex..... | 1.00 | .69 | 1.69 |
| 105 | Greenleaf..... | 1.00 | 1.34 | 2.34 | 4 | Wallach..... | 23.12 | 3.36 | 26.48 |
| 107 | Hayes..... | 20.22 | 5.15 | 25.37 | 121 | Webb..... | 11.88 | 5.94 | 17.82 |
| 33 | Henry..... | 8.94 | 3.14 | 12.08 | 51 | Webster..... | 19.97 | 8.88 | 28.85 |
| 115 | Hilton..... | 4.50 | 1.39 | 5.89 | 54 | Weightman..... | 7.13 | .91 | 8.04 |
| 119 | Hubbard..... | 7.57 | 2.78 | 10.35 | 117 | Western High..... | 80.19 | 59.55 | 139.74 |
| 147 | Hyde..... | 13.13 | 8.81 | 21.94 | 136 | Wheatley..... | .81 | .81 | .81 |
| 69 | Jackson..... | .66 | .69 | 1.35 | 89 | Wilson..... | 5.90 | 1.65 | 7.55 |
| 23 | Jefferson..... | 30.19 | 51.29 | 81.48 | 49 | Wormley..... | 13.41 | 14.26 | 27.67 |

SUMMARY.

| | |
|--------------------------|------------|
| Total accounted for..... | \$3,942.70 |
| Material on hand..... | 2,039.49 |
| Unexpended..... | 17.81 |
| Total..... | 6,000.00 |

Thanking you for the great assistance rendered me in the performance of my official duties and the uniform kindness shown me during the past year, and with hearty appreciation of the aid extended me by the men in this department in increasing and maintaining its efficiency, I have the honor to be,

Very respectfully,

HENRY STOREY,
Superintendent of Repairs.

The INSPECTOR OF BUILDINGS.

REPORT OF THE INSPECTOR OF PLUMBING.

AUGUST 29, 1908.

SIR: I have the honor to submit herewith the twenty-sixth annual report of the work performed by this office for the fiscal year ending June 30, 1908:

INSPECTIONS.

| | |
|---|--------|
| Preliminary inspections of plumbing, etc..... | 7,828 |
| Inspections of remodeling, extensions, and repairs to plumbing in old houses..... | 6,786 |
| Inspections of plumbing in new buildings..... | 5,731 |
| Inspections of gas and gas fitting..... | 1,475 |
| Inspections of lead and water service pipes..... | 789 |
| Inspections of new terra cotta house sewers..... | 86 |
| Inspections of repairs to terra cotta sewers..... | 512 |
| Peppermint tests and final inspections..... | 2,585 |
| Sewer taps into main sewers..... | 1,012 |
| Notices served on owners and plumbers by inspectors..... | 192 |
| Examinations on complaints..... | 1,841 |
| Inspections of District work in progress..... | 710 |
| Total..... | 29,547 |

It will be seen there is a slight decrease in the number of inspections this year over that of last year, which can be accounted for in the difference in the number of new buildings—3,138 last year and 1,365 this year—and this can probably be assigned to the money panic in the early spring, as that condition probably deterred many from building. This condition is only temporary, and I have no doubt the inspections will increase in the future in about the same proportion as in the past.

| Inspections. | Inspections. |
|-----------------------|--------------------|
| 1894-95..... 5,708 | 1901-2..... 22,621 |
| 1895-96..... 8,677 | 1902-3..... 25,297 |
| 1896-97..... 14,113 | 1903-4..... 25,637 |
| 1897-98..... 17,550 | 1904-5..... 27,337 |
| 1898-99..... 17,600 | 1905-6..... 30,185 |
| 1899-1900..... 17,405 | 1906-7..... 32,100 |
| 1900-1901..... 18,965 | 1907-8..... 29,547 |

I wish to again call attention to the necessity of increasing the inspecting force by at least two men asked for in the estimate. The districts now assigned the men are entirely too large to protect the assistant inspectors against passing defective work, as it can be skillfully patched or doctored to deceive the men, and it is easily overlooked in the hurried inspection they are forced to give each job to enable them to examine all work reported for inspection on any one day. When the defects develop later on, the blame naturally falls on the head of the office. Under the present condition it is unjust to blame the inspector because he can not give the proper time to protect himself, the public, and the office.

It is almost impossible for the inspectors to be at a building at the time designated by the plumber, especially on a busy day, which subjects the office to criticism and entails additional expense to the property owner, who must pay for the time the plumber is thus delayed on remodeling work. If the two additional men asked for are allowed, this state of affairs will be relieved. Considering the number of inspections made by the six field inspectors and the amount of office work which is required of them to properly look after and report upon the plumbing work installed by 198 registered plumbers, shows the present force is inadequate when consideration is also given to the great number of complaints of defective plumbing received by this office and which consumes a great deal of time in having the complaint rectified.

The salary of the assistants is exceedingly low when it is taken into consideration that their knowledge of plumbing raises them above the average workmen, that they must detect defective work and badly designed plumbing and often instruct mechanics how to do it. The salary they receive is below that received by assistant inspectors of plumbing in Philadelphia (\$1,200), St. Louis (\$1,440), and the assistant inspectors of building this city (\$1,200). There has been no increase in the salary since the office was created, yet the work has increased materially and likewise the cost of living. If the increase from \$1,000 to \$1,300 is allowed, it will be an incentive for better work, as the man who falls behind will have a better man placed in his position at the increased salary.

TEMPORARY ASSISTANTS.

If the two additional permanent assistant inspectors of plumbing are not allowed, as provided for in the estimates, I urge that two temporary assistants again be provided for, as was done in the past two years. These temporary assistants have been of material benefit and assistance to the present force during the spring and summer months. If the permanent men are not to be allowed, I would urge that the appropriation for the temporary assistants be made immediately available so that these men may be able to take care of the increased work in the spring and summer months, and that their term of service may be for six consecutive months, as it is very difficult to obtain good men for only three months employment in the summer of one year and the spring of the next.

INDEX CLERK.

The great number of inspections necessarily involves an increase in the reports, indorsements, letters, and orders, which have to be written and indexed and filed, and which involves the greatest effort on the part of the present clerk and myself to keep the office work up to date, frequently causing us to work overtime and to be continually rushed from the beginning to the end of the official day. For this reason, and because this office has never been assigned a messenger, I urgently recommend that an index clerk asked for in the estimates be provided to relieve the present clerk of telephone duty, the indexing of complaints, engineer department documents and other papers, the filing of office papers, and other small duties too numerous to mention, but which now devolve upon the present clerk. He could also relieve the assistant inspectors of the indexing and writing of their reports, taking stenographic notes from the assistants, thus allowing them to get into their respective districts more promptly than at present.

COMPLAINTS.

During the year there were 1,841 complaints filed in this office against defective plumbing, etc. The complaints necessitate the inspector giving a great amount of his time investigating the cause of the complaint and in writing the report of the same in the office. They also require numerous inspections after the service of the notice before the defective plumbing is finally corrected. The complaint of water in the cellar is one which causes more inspections than any other, and its cause is most difficult to determine, because it can be brought about by leaking sewer or water service not only in the house where the water appears in the cellar, but in houses quite remote from the cellar in which the water appears. I have continued the use of aniline yellow powdered dye on supposed defective sewers with very good results. A small amount of this dye colors a large quantity of water a yellowish green tint, and it is a most positive proof that the sewer of the adjoining property is leaking when the colored water appears in the cellar where the accumulation is complained of.

OFFICE WORK.

| | |
|---|--------|
| Orders to repair plumbing and gas fitting..... | 1, 183 |
| Letters to the Engineer Commissioner and other officials..... | 302 |
| Miscellaneous letters and papers..... | 1, 561 |
| Indorsements on communications..... | 1, 969 |
| Police court cases, fined or nolle prossed..... | 43 |
| Plans prepared..... | 36 |
| Specifications prepared..... | 22 |
| Plans and specifications revised..... | 8 |
| Examination of plans for new buildings..... | 1, 365 |
| Examination of building repair applications..... | 2, 497 |
| Number of 2-cent stamps used..... | 2, 416 |
| Number of 1-cent stamps used..... | 259 |

Attention is called to the item of indorsements in the foregoing table, the number this year being an increase of 973 over that of last year. The indexing of these records consumes a great deal of the time of the present clerk, each engineer document being cross indexed four times, and is another argument for the great need of the index clerk previously mentioned and asked for in the estimates. This is only one of the duties which this new clerk could take up, relieving the present overworked clerk, and also keep the records right up to date.

POLICE COURT CASES.

| | |
|--|----|
| Total number of warrants obtained during the year..... | 43 |
| Disorderly conduct, public convenience stations..... | 5 |
| Violation of plumbing regulations..... | 9 |
| Unlicensed gas fitters..... | 5 |
| Unlicensed plumbers..... | 20 |
| Working for unlicensed plumbers..... | 1 |
| Excavating without having obtained permit..... | 2 |
| Violation of building regulations relative to ventilation of water-closet apartment..... | 1 |
| Total..... | 43 |
| Disposition: | |
| Fines imposed..... | 9 |
| Forfeited collateral..... | 15 |
| Nol-prossed..... | 10 |
| Pending..... | 3 |
| Not apprehended..... | 1 |
| Dismissed..... | 3 |
| Personal bonds..... | 2 |
| Total..... | 43 |

The fines imposed aggregated the sum of \$107 and the forfeitures \$155.

PER DIEM EMPLOYEES.

| | |
|---|----------|
| Stonewall Jackson, laborer, 1½ days, at \$2..... | \$3.00 |
| Samuel Tapp, temporary assistant inspector of plumbing, at \$3.25 per day, 200 days..... | 650.00 |
| John E. Boyland, temporary assistant inspector of plumbing, at \$3.25 per day, 147 days..... | 477.75 |
| J. W. Oehman, temporary draftsman, chargeable to appropriation "Public schools, District of Columbia, 1907-8, repairs to plumbing," 207 days 1½ hours, at \$2.50 per day..... | 518.04 |
| J. W. Oehman, temporary draftsman, chargeable to appropriation "Drainage of lots," 10 days 5½ hours, at \$2.50 per day..... | 26.93 |
| Total..... | 1,675.72 |

The two temporary assistant inspectors of plumbing mentioned above were paid from the appropriation of \$1,200 for temporary assistants.

It was found necessary during the fiscal year to provide a temporary draftsman to assist in the preparation of school plans, measuring buildings in connection with repairs to plumbing in existing schools, and other detail work incident thereto. This work was performed by John W. Oehman for the time and amount as set forth above.

SUBURBAN HOUSE SEWERS.

In some of the suburbs appropriations have been made for trunk sewers, but money has not been appropriated in large enough sums to give immediate relief in the crowded suburbs, thus forcing the citizens to maintain temporary subsoil drains, septic tanks, etc., where the soil is found suitable. However, in many cases the soil will not allow the introduction of these systems, so that the occupants of the premises are practically debarred from having modern plumbing installed within their premises. Public sewer and water mains, when extended, increase the value of the land abutting on

either side and naturally increase the revenues of the District by increased taxation, besides giving property owners an opportunity for installing modern plumbing and lessen to a great extent the danger of disease.

COMPULSORY DRAINAGE.

At the beginning of the fiscal year there were 36 cases on hand and a total of 82 cases were received during the year, making a total of 118 premises which were disposed of as follows:

| | |
|--|----|
| Work done by owners..... | 46 |
| Buildings torn down..... | 16 |
| Returned to health office..... | 8 |
| With the board for the condemnation of insanitary buildings..... | 10 |
| Actions pending..... | 8 |
| Received too late for action this year..... | 14 |

There were 16 cases where houses were connected to sewer and water by this office under contract, at a cost of \$2,434.75, leaving a balance of allotment of \$65.25.

I beg to call attention to the large proportion of cases where work was done by the owner after papers were referred to this office for action. This was directly due to the particular attention paid to this part of the work and was the result of many conferences with owners and agents.

PLUMBING IN PUBLIC-SCHOOL BUILDINGS.

The appropriation of \$50,000 for "Repairs to and changes in plumbing in existing school buildings, 1908," has been expended as follows:

| | |
|---|------------|
| Allotted superintendent of repairs..... | \$6,000.00 |
| Complete remodeling: | |
| Abbott..... | \$6,355.95 |
| Adams..... | 3,501.02 |
| Berret..... | 2,850.10 |
| Fillmore..... | 3,371.14 |
| Garrison..... | 3,490.90 |
| Magruder..... | 4,156.02 |
| Monroe..... | 4,575.58 |
| Pierce..... | 2,929.94 |
| Smallwood..... | 3,619.80 |
| Van Buren..... | 8,126.00 |
| | 42,976.45 |
| Preliminary or partial work in: | |
| Arthur..... | 18.20 |
| Carberry..... | 17.78 |
| Logan..... | 17.90 |
| Orr..... | 14.84 |
| Patterson..... | 23.84 |
| Phillips..... | 17.74 |
| Polk..... | 17.80 |
| Slater..... | 17.84 |
| Taylor..... | 17.80 |
| Tyler..... | 35.00 |
| Wilson..... | 14.84 |
| | 213.58 |
| Drawing materials, etc..... | 18.72 |
| Inspection incidentals..... | 205.77 |
| Temporary draftsman..... | 518.04 |
| Balance on hand..... | a 67.44 |
| | 50,000.00 |

There were ten buildings in which the plumbing work was completely remodeled, new seat-action closets, urinals, lavatories, drinking fountains, etc., installed, and new lead water services provided to replace the partially obstructed old black iron services. In the case of the Van Buren School an outside building was constructed

^a This amount is practically obligated on account of extra work now being done and for which no voucher has been sent forward. The final balance will be less than \$1.

complete, with heating plant, etc., and with facilities for the accommodation of Van Buren and annex, the toilet being for the use of the two school buildings, and in addition to relaying a portion of the old sewer several hundred feet of new cast-iron sewer was laid to connect the rain leaders of the Van Buren annex with the public sewer.

All closets installed this year have been of the seat-action, pressure-tank closet type, which has been made up especially from specifications prepared in this office. I have been using this type for some years and find it to be remarkably free from expense for repairs, costing less to keep this type in repair than an ordinary type of pull tank closet or automatic seat-acting rod attachment to closet and tank.

The urinal is a slate stall fixture, with continuous overflow flush and with a partial ventilation. The recent report of the schoolhouse commission states: "In its many inspections the commission saw no other urinal fixture that could compare with this one for efficiency." The original designs, as well as plans for many improvements to this fixture, were drawn in this office, and it can be purchased from several different makers at a cost of from \$22 to \$28 per stall (depending on conditions), which is less than a good tank and common lipped urinal can be bought and set.

Lavatories are of vitrified porcelain (stone china) and are better and more durable than the cast-iron enameled kind so much used and cost no more, and the drinking fountains are of the most modern and sanitary type.

CONVEYANCE.

The need of a conveyance for this office is apparent, on account of the fact that the school buildings where work is going on are spread all over the city, frequently with two or three jobs in extreme opposite outlying sections of the District. It is not possible to use a bicycle except in conjunction with the street cars, and even then not more than an average of 8 or 9 thorough inspections a day can be made by one man. In the fiscal years 1904 and 1905 one man, the draftsman in this office, made all necessary inspections. In 1906, in spite of the best he could do, a considerable amount of poor work resulted. In the beginning of 1906 and 1907 (fiscal year) it was ascertained that a horse and buggy could be hired for \$45 per month or a gasoline runabout for \$50 per month, and arrangements were made for the runabout, which was used during the summers of 1906 and 1907, one man (the draftsman) doing all necessary inspecting with eminently satisfactory results, it being an easy matter to make 15 inspections in a day, and on one occasion the number reached 28. At the beginning of the current year I tried to arrange for the same service, but it was denied. On account of this refusal I have had to recommend appointment of two assistant inspectors of construction to look after the construction and plumbing work being installed in 18 schools, and they are now employed at a compensation of \$208 per month, assisting the draftsman in inspection work. Even with the excess expenditure of \$158 a month over the rent of a machine (four times as much) the service does not begin to be as satisfactory. The combination of a structural inspector and a plumbing inspector is hard to find. Many things are liable to slip through that would not be possible had the men the special knowledge required in this work. These extra men will have become familiar with the requirements of the special work of this office just about the time there is no longer any need for their services. It is also a hard matter to find good men for a short period of three or four months. It would appear to be economy and good policy to ask of Congress a permanent means of transportation for this office, to be used for inspection of construction work under way in schools, engine houses, etc., and for transportation of gauges, scales, etc., for testing materials on public work, and inspection of plumbing work in private buildings, and for the carrying of supplies for the public convenience stations. Inasmuch as we have no messenger or driver, I would respectfully recommend that an item of livery (\$660) be included in the estimate to Congress.

BADGES.

I beg to invite attention to a subject I believe worthy of consideration, and that is the fact that the plumbing office has one style of badge, the building office another, the sewer, water, and surface departments still another. Practically every employee of the District wears a differently formed and designed badge. Some are artistic, and some are decidedly not. It would appear to me that, barring the fire and police departments, all employees coming in contact with the public outside of the office, such as inspectors, foremen, supervisors, etc., should have one and the same type of badge, which should be neat and artistic.

As the matter now stands the badges are the selection of each individual head of office, and each new badge purchased or old badge repaired costs about twice as much as if there was a single design for the whole municipal service.

PUBLIC CONVENIENCE STATIONS.

The two stations provided for in the original bill have both been in operation for a full year, and the results have only served to show that more stations are needed. The current appropriation bill provides for one, and I would respectfully recommend that others be provided for yearly, say two this year and one more each year until a sufficient number have been built.

The total number of patrons reported for both stations for the past year is 1,924,177, being practically 1,000,000 for each station, or actually 5,272 per day, 293 per hour, nearly 5 per minute for both stations, during the time they were open. Their great amount of use amply demonstrates their real necessity to the city. Twelve and one-half per cent of the total number using the stations were women, who contributed about 7 per cent of the receipts.

The money received for fees amounted to \$746.75, which was turned into the Treasury as miscellaneous receipts. In connection with this matter of fees, I beg to call attention to a peculiar condition. All laundry work is charged to and soap is paid for from money appropriated for maintenance, and the more money taken in, the greater expense of operation. If it is possible to have authority granted in the appropriation bill for 1910 to deposit receipts with the collector of taxes to the credit of the appropriation, so that the sums received from fees may be made available to pay a portion of the running expenses, I would recommend that this be done, as it would facilitate matters and reduce the amount which must be appropriated by Congress for maintenance, besides provide a fund which could be drawn upon if for any unforeseen reason increased patronage would exceed the estimated number, thus materially upsetting my estimate for maintenance.

The total cost for operating the stations, including wages, supplies, repairs, and all charges, amounted to about $3\frac{7}{8}$ mills per person using them, and by subtracting the receipts from expenses, it amounted to $2\frac{3}{4}$ mills per person.

PER DIEM EMPLOYEES, PUBLIC CONVENIENCE STATIONS.

During the year the following persons have been employed on a per diem basis, from June 16 to June 30, 1908, inclusive:

| | |
|--|----------|
| Mary Donohue, fifteen days, at \$1.25..... | \$18. 75 |
| Mary Martin, fifteen days, at \$1.25..... | 18. 75 |
| Mary E. Divver, fifteen days, at \$1.10..... | 16. 50 |
| Hattie Welsh, fifteen days, at \$1.10..... | 16. 50 |
| Total..... | 70. 50 |

For the balance of the fiscal year the following employees were paid on a monthly basis, as set forth opposite their names: Edwin Baum at \$55 per month, Burnet Gibson at \$55 per month, John Boyland at \$50 per month, C. B. Washington at \$50 per month, S. G. Garner at \$50 per month, A. F. Harmer at \$50 per month, R. H. Harvey at \$50 per month, Mary Donohue at \$45 per month, Mary Martin at \$45 per month, Mary Divver at \$40 per month, Hattie Welsh at \$40 per month, H. T. Gibson at \$50 per month, E. B. Thomas at \$50 per month.

C. W. White was employed as substitute at \$1.50 per day, and substituted a number of times during the year.

There were only 8 regular employees during the year, the other men being employed and either resigning or being discharged, thus serving for only part of the year.

The aggregate salary paid these monthly employees amounted to \$4,441.10, making the total amount paid in salaries to employees and substitute \$4,511.60.

PUBLIC BATHS.

For several years there has appeared in my annual report a plea for public baths. Last year the estimate of the commissioners to Congress carried an item for a building, but on account of the confounding of this item with the demands of the playgrounds association it was cut out of the bill. While a public bath house might well be erected near a playground site, the fact that it is in no sense a play building should be borne in mind. It is an establishment for the promotion of cleanliness among the poorer adult population, an aid to civic improvement, and a necessity to certain classes of our population. The child, of course, should be made as welcome as the adult.

Washington is the only city of any size in the United States that can not give its citizens or visitors a municipal bath. Chicago has been furnishing free baths (open all the year round) to its adult poor for about fifteen years, and Boston, Baltimore, Brooklyn, New York, Albany, Syracuse, Cleveland, San Francisco, and a score of smaller cities have followed the lead set by the more progressive cities.

Washington is even without a place where one can get a shower for a reasonable price. Half a dozen clubs of the exclusive type and the Young Men's Christian Association have baths for members only. At a couple of Turkish baths you can get a more or less satisfactory tub bath for 25 or 50 cents. At the bathing beach (if you take your own bathing suit and towel with you) you can get a free bath three months in the year, but it is a long and hot walk from the nearest car line, and several miles from the congested parts of the city, that need a public bath house. As at present situated, and in its present condition, the bathing beach is unsatisfactory and expensive, except to the adults in the immediate neighborhood and the small boys, who are willing to walk any distance for a swim, not a wash. It is not the citizen whose home is provided with a tub or who is a member of some exclusive club that the public bath is designed to reach, but the one who has no home or the dweller in the alleys. The former would be glad to have a bath, but can't afford one at a fancy price, and the latter could be taught (in fact, would teach himself) the benefits of frequent bathing if the privilege were only extended to him. But it must be remembered that those we would try to teach cleanliness will not walk great distances for a bath.

An authority on public baths says: "To serve those for whose use they are intended they must be located in the crowded districts, within easy walking distance. Where public baths have been longest in use there is not only a marked improvement in the general health, but a resultant increase in mental alertness as well." Doctor Barrick says: "I consider that I have done more to prevent the spread of disease in my work for public baths than in all my work as a physician," and "Money spent on public baths, where people can go and get clean, does more toward raising the standard of health and morality than a much greater amount spent in any other way." Another authority says: "You can't be healthy or even good unless you're clean," and the Boston bath commission states, in speaking of a marked improvement in the number of arrests of young persons, "The work of the bath department has been the greatest single agency in effecting this vital improvement in public morals."

Some people are exceedingly careless regarding bathing or keeping themselves clean; this may be due to lack of bathing facilities or gross carelessness. If these persons had a public bath within easy walking distance where they could get a shower with plenty of good hot water and soap without cost to themselves, the invigoration, freedom of expense, and the proximity of the building would teach them bathing as a habit.

Washington would certainly reap the benefits of public bath houses in the improvement in slum and alley conditions, and I earnestly recommend that this item in my estimate be again submitted and that an effort will be made to have it retained and suitable appropriation provided.

BATHS IN SCHOOLS.

I am heartily in favor of providing pool baths for instructing school children to swim. One large pool bath in a white school and one in a colored would furnish sufficient accommodations to make every school graduate of the public schools a swimmer. The cost of constructing these pools would not exceed \$5,000 each including all necessary connections if built in connection with new buildings. Two instructors, with the assistance of the teachers from the various buildings as they brought their classes, would be a sufficient force. The pools could be adjacent to the school steam heating plants so that the water could be heated during the winter.

Perhaps one pool could be placed in the basement of the proposed addition to the McKinley Manual Training School and the other in the proposed addition to the Armstrong School, both excellent localities.

During each summer we have throughout the country the usual sad and unnecessary fatal accidents from drowning, many being young people. The means of making such accidents rare lies in teaching the children to swim at a time when they can best be instructed in the art of swimming and how to conserve their strength and to be fearless when necessity requires self-control and prompt action. When the total cost is so little compared with the value of one single child's life, it does not seem wise to longer delay providing pool baths for instructing the young to swim.

Annette Kellerman, the famous woman swimmer, says that she has "never yet seen a boy or girl who could not learn to swim, and recommends strongly that the matter of teaching 'dry land swimming' and instruction in tanks by the school authorities be taken up in America as it has in England, Australia, and some of the countries of continental Europe."

Swimming pools provided for the scholars could be used for the public after school hours.

BATHING BEACH.

As an interested citizen and ex-member of the bathing beach committee, I desire to offer the following suggestions for a bathing beach, with the hope that it will meet with the approval of the commissioners, Col. Charles S. Bromwell, officer in charge of public buildings and grounds, and Congress, and that a suitable appropriation can be obtained.

With the water front, such as this city has, it seems a shame that it is not provided with a decent bathing beach, instead of the mud hole, which is unfit for a swimming pool, being better adapted for the propagation of mosquitoes, water lillies, snakes, and frogs than a bathing pool. The small boy gives little attention to such conditions, but the adult objects seriously to bathing in such a place. What we need is a first-class beach, provided with permanently constructed buildings designed and finished artistically with approaches, hedges, and flower beds, artistically arranged. Such a location could be obtained on the west bank of the tidal basin and would not interfere in any way, in my judgment, with the improvements that have been made by the Government in this park. The scheme would require that certain filling in with gravel and sand would have to be done 200 to 300 feet from the shore, besides forming steps or incline to the water possibly 100 feet wide; establishing danger lines, floats, etc., and if flood gates could be erected at the entrance to this basin at the Georgetown channel the muddy water could be kept out and besides prevent the rise and fall of the tide during the winter, when ice forms, and by this means an ideal summer bathing beach could be formed for the male and female swimmers, and a safe skating bas in provided for winter use for those who enjoy this fascinating and exhilarating sport.

Respectfully submitted.

HENRY B. DAVIS,
Inspector of Plumbing.

Capt. Wm. KELLY,
Corps of Engineers, U. S. Army.
Assistant to Engineer Commissioner, District of Columbia.

REPORT OF THE PLUMBING BOARD.

WASHINGTON, D. C., August 28, 1908.

SIR: I have the honor to submit the following statement of the work of the Plumbing Board for the past fiscal year:

There were held during the year 25 meetings for the examination of candidates for licensing as master plumbers and gas fitters. The total number of examinations held during the year is 41. The number of original candidates examined for licensing as master plumbers and gas fitters is 20, of whom 5 passed and 15 failed. Of those who had been previously examined for licenses as master plumbers and gas fitters, 5 passed and 12 failed in their examinations. Three candidates passed the examination for licensing as master gas fitters and 1 failed.

The following changes in the personnel of the board were ordered by the Commissioners: Mr. P. C. Schaefer was appointed a member of the board for two years, vice Jos. R. Quinter, whose time had expired. Mr. P. J. Brick was reappointed for a period of two years, and Richard A. O'Brien was reappointed a member of the board, said appointments to take effect July 1, 1907.

Very respectfully,

PETER C. SCHAEFER, *President.*
RICHARD A. O'BRIEN, *Secretary.*

Capt. Wm. KELLY,
Corps of Engineers, U. S. Army,
Assistant to Engineer Commissioner, District of Columbia.

RECORD DIVISION.

[Directly under the supervision of the engineer commissioner.]

| | |
|--|--|
| CHIEF CLERK OF THE ENGINEER DEPARTMENT..... | DANIEL E. GARGES. |
| PERMIT CLERK..... | H. M. WOODWARD. |
| WHARF COMMITTEE..... | J. R. SUTTON, <i>Harbor Master.</i> |
| | W. J. DOUGLAS, <i>Engineer of Bridges.</i> |
| | D. E. GARGES, <i>Chief Clerk, Engineer Department.</i> |
| BOARD FOR CONDEMNATION OF INSANITARY BUILDINGS | Capt. WILLIAM KELLY, <i>Assistant to Engineer Commissioner.</i> |
| | WILLIAM C. WOODWARD, <i>Health Officer, District of Columbia.</i> |
| | SNOWDEN ASHFORD, <i>Inspector of Buildings.</i> |
| ASSISTANT ENGINEER IN CHARGE OF ROCK CREEK PARK..... | L. R. GRABILL. |

REPORT OF THE CHIEF CLERK OF THE ENGINEER DEPARTMENT.

WASHINGTON, D. C., *September 29, 1908.*

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1908:

The work done includes the briefing, recording, and indexing of all communications concerning matters under the jurisdiction of the engineer commissioner, together with all indorsements, references, correspondence, etc., connected therewith; the recording of all assessment work ordered by the commissioners; the preparation and execution of all contracts and of vouchers in payment thereof; the keeping of accounts of all appropriations expended under the jurisdiction of the engineer department; the distribution of all specifications for construction work of engineer department, and the record of all correspondence of the department.

The communications during the year amounted to nearly 13,000, the indorsements on these communications to nearly 100,000, and in addition to these letters were copied and mailed to the extent of about 6,000. In carrying on this work the card record system is used, and much improvement in this system has been made during the year.

A card record is kept of all assessment work ordered by the commissioners, and this is done in such a manner as to insure that when the work is executed the papers are properly forwarded to the assessor's office for assessment. By this record every item of assessment work is systematically followed from the date when it is ordered by the commissioners to the time of its transmission to the assessor's office and receipts obtained from that official of all such papers are retained in the office.

This office also keeps a card record of all contracts, as well as copies of the contracts, and of the date of expiration of guaranties on contract work. Prior to the expiration of the guarantee on such work the office under whose jurisdiction it was done is notified in order that an examination may be made to see if the terms of the guarantee are complied with. Vouchers for the amount retained on these contracts are also prepared in this office and forwarded for certificate to the various officials under whom the work was done.

All vouchers in payment for construction work under contracts executed by the engineer department are also prepared in this office and a card record is kept of them. The office also keeps an account of all appropriations expended by the engineer department and charges all vouchers against these appropriations. The number of such vouchers during the past fiscal year amounted to 11,209. It also keeps an account of the leaves of absence of all employees of the engineer department, and the number of applications passed during the year was 3,136.

The accounts of the appropriations kept differ from those kept by the auditor. When an appropriation is made by Congress an account with it is opened in the books of this office and all requisitions for material and all pay rolls for labor and other charges against the appropriation are entered, so that the available balance of the appropriation can be given by the bookkeeper of this office at any time. The books of the auditor show only actual payments, but do not show obligations where payment has not yet been made. The books are checked with those of the auditor's office at the end of each quarter, and this system of handling the accounts has proved to be very valuable.

One of the most important duties of this office is the preparation of all contracts for labor or material entered into by the District. The law requires that all such contracts, when the amount involved is over \$500, shall be formally executed and bonded. The number of such contracts drawn during the year amounted to 250, and this branch of the work is constantly increasing.

In this connection I desire to call your attention to the time involved in the preparation and execution of these contracts. When the work has been advertised and proposals received, the work is ordered by the commissioners and the papers forwarded to this office for the preparation of the contract. After the contract is prepared it is forwarded to the office having charge of the work to see that it covers the requirements of the proposal and specifications. Existing orders of the commissioners require that the contract shall be then forwarded to the auditor of the District with reference to the clause regarding payments and to the corporation counsel as to form. This procedure, owing to the amount of other work in these two offices, involves usually from three days to a week. After being passed upon by these officials the contract is returned to this office and forwarded by it to the contractor for execution. After it is executed the orders of the commissioners require that it should again pass to the auditor for certificate as to the sufficiency of the surety on the bond attached to the contract and to the corporation counsel for approval as to the form of the bond. This usually involves another week's delay. After this is done the contracts must be forwarded to the commissioners for signature and signed by each commissioner personally, and this also takes time, so that practically a month intervenes between the date when the contract is drawn and the date when it is signed by the commissioners. Owing to this delay it has frequently happened that the work provided for by the contract is actually performed by the contractor before the contract is signed. I believe that much of the delay is unnecessary. The contracts are drawn upon specifications, and all of them follow a general form, so that it would not seem necessary to have the corporation counsel pass on the form in each instance.

The payment clauses are also practically the same in all contracts, so that it would seem unnecessary that the auditor should pass upon each case individually. I believe that it would be a sufficient safeguard if this office undertook to pass upon the sufficiency of the form and payment clauses, and that it should have the contracts executed, and after execution forward them to the corporation counsel, who can pass upon the entire contract at one time and thus have the papers executed promptly. I suggest that the orders of the commissioners be amended accordingly.

This office is making an effort to impress upon the heads of all divisions of the engineer department the importance of exercising care in the preparation of all specifications in order that they may be uniform. All specifications are distributed by the chief clerk, who is also the chairman of a committee charged with the duty of opening all proposals affecting the engineer department.

Schedules of bids received during the fiscal year for work and materials furnished and statements of contracts for street improvements, sewers, buildings, construction material, supplies, and miscellaneous work are herewith.

Very respectfully,

DANIEL E. GARGES,
Chief Clerk, Engineer Department.

Maj. JAY J. MORROW,
Corps of Engineers, U. S. Army,
Engineer Commissioner, District of Columbia.

Statement of expenditures from general appropriations for forage, horses, wagons, carts, etc.

[In accordance with act of Congress approved May 26, 1908.]

| | |
|--|------------------|
| Cleaning and repairing sewers and basins..... | \$6,020.50 |
| Main and pipe sewers..... | 506.12 |
| Suburban sewers..... | 402.26 |
| Unused balance..... | 420.25 |
| Elimination of grade crossings..... | 104.90 |
| Assessment and permit work..... | 595.34 |
| Paving roadways..... | 20.00 |
| Georgetown schedule..... | 3.00 |
| Northwest schedule..... | 9.00 |
| Southwest schedule..... | 7.00 |
| Southeast schedule..... | 16.00 |
| Northeast schedule..... | 32.34 |
| Approach to Connecticut Avenue Bridge..... | 38.12 |
| Approach pumping station..... | 8.02 |
| Pave Twenty-third street..... | 3.00 |
| Pave South Carolina avenue..... | 9.00 |
| Grade and improve Albemarle street..... | 10.00 |
| Grade and improve Brookland avenue..... | 2.00 |
| Grade and improve Rittenhouse street and Western avenue..... | 2.00 |
| Grade and improve Kenyon street..... | 4.00 |
| Grade and improve Chesapeake street..... | 4.00 |
| Lincoln road, grade and improve..... | 5.00 |
| Pave Kalorama road..... | 3.00 |
| Pave Randolph street..... | 8.00 |
| Grade and macadam Sheriff road..... | 3.00 |
| Pave Seaton place..... | 8.34 |
| Grade and improve Sixteenth street extended..... | 19.34 |
| Grade and improve Rhode Island avenue east of Brentwood road..... | 10.00 |
| Grade and improve Fifteenth street..... | 5.00 |
| Macadamize Nichols avenue..... | 3.00 |
| Grade and improve Massachusetts avenue..... | 20.00 |
| Grade and improve Euclid street..... | 1.00 |
| Grade and improve Nineteenth street..... | 1.00 |
| Grade and improve Shepherd street..... | 4.00 |
| Grade and improve T street..... | 3.00 |
| Grade and improve Longfellow street..... | 1.00 |
| Pave Harvard street..... | 5.00 |
| Grade and improve Rittenhouse street, Brightwood avenue, and Blair road..... | 6.00 |
| Grade and improve Eighteenth street..... | 3.00 |
| Pave Rhode Island avenue, North Capitol to First street..... | 10.00 |
| Pave Eleventh street..... | 2.00 |
| Repairs to streets..... | 299.74 |
| Sidewalks and curb..... | 6.00 |
| Repairs to county roads..... | 110.00 |
| Construction and repair of bridges..... | 20.00 |
| Monroe Street Bridge..... | 32.14 |
| Parking commission..... | 2,139.57 |
| Repairs to schools..... | 389.62 |
| Repairs to police station..... | 25.42 |
| Repairs to engine houses..... | 29.92 |
| High service..... | 7,756.93 |
| General expenses water department..... | 1,254.57 |
| Total..... | 20,401.44 |

PROPOSALS FOR SEWER CONSTRUCTION.

Schedule of proposals for constructing sewers in streets of Chevy Chase, D. C.

[Received July 15, 1907.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 10-inch diameter pipe. | 12-inch diameter pipe. | Rock ex- cavation. | Total cost. |
|----------------------------------|------------------|----------------------------|------------------------------|------------------------------|-----------------------|----------------|
| James A. Coyle..... | \$0.90 | \$20.00 | \$0.80 | \$0.90 | ..... | \$11,201.50 |
| R. J. Beall Construction Co..... | .95 | 19.00 | .90 | .95 | ..... | 11,935.75 |
| E. G. Gummel..... | 1.30 | 22.00 | .69 | .85 | ..... | 13,175.00 |
| Lyons Bros..... | 1.40 | 18.00 | .85 | .90 | \$5.00 | 14,297.75 |

Schedule of proposals for constructing sewers in South Capitol street between Canal and G streets.

[Received July 8, 1907.]

| Bidder. | Excava- tion. | Brick ma- sonry. | Vitri- fied sewer brick. | Con- crete ma- sonry "B." | Con- crete ma- sonry "C." | 24-inch diam- eter pipe. | 6-inch diam- eter pipe. | Total cost. |
|--------------------------------|------------------|------------------------|-----------------------------------|---------------------------------------|---------------------------------------|-----------------------------------|----------------------------------|----------------|
| The Warren F. Brenizer Co..... | \$1.75 | \$17.00 | \$24.00 | \$9.00 | \$9.00 | \$1.40 | \$0.30 | \$7,408.75 |

Schedule of proposals for constructing outlet to old B street sewers.

[Received July 29, 1907.]

| Bidder. | Excava- tion. | Red brick masonry. | Concrete masonry. | 6-inch diameter pipe. | Total cost. |
|----------------------------------|------------------|-----------------------|----------------------|-----------------------------|----------------|
| The Warren F. Brenizer Co..... | \$1.20 | \$16.00 | \$8.50 | \$0.30 | \$21,343.00 |
| R. J. Beall Construction Co..... | 1.48 | 18.00 | 9.60 | .35 | 24,946.50 |
| E. G. Gummel..... | 2.00 | 20.00 | 10.00 | .50 | 29,255.00 |

Schedule of proposals for constructing sewers in valley of Soapstone Branch, etc.

[Received September 30, 1907.]

| Bidder. | Excava- tion. | Sewer brick masonry | 18-inch diameter pipe. | 15-inch diameter pipe. | Rock ex- cavation. | Total cost. |
|----------------------------------|------------------|---------------------------|------------------------------|------------------------------|-----------------------|----------------|
| The Warren F. Brenizer Co..... | \$0.73 | \$17.00 | \$1.14 | \$0.99 | \$3.00 | \$10,856.00 |
| E. G. Gummel..... | .89 | 20.00 | .89 | .84 | 4.00 | 10,861.00 |
| I. H. Fisher..... | .86 | 20.00 | 1.15 | 1.10 | 4.00 | 12,260.00 |
| R. J. Beall Construction Co..... | .89 | 19.50 | 1.27 | 1.15 | 4.00 | 12,810.00 |
| James A. Coyle..... | 1.10 | 22.00 | 1.50 | 1.40 | 4.00 | 15,290.00 |

Schedule of proposals for constructing sewer in Arkansas avenue, between Delafield and Emerson streets and Delafield street between Arkansas and Brightwood avenues.

[Received November 25, 1907.]

| Bidder. | Ordinary excava- tion. | Sewer brick masonry. | Vitrified brick masonry. | Concrete masonry "B." | Concrete masonry "C." | Total cost. |
|----------------------------------|------------------------------|----------------------------|--------------------------------|-----------------------------|-----------------------------|----------------|
| E. G. Gummel..... | \$0.70 | \$15.00 | \$21.00 | \$8.00 | \$8.00 | \$12,925.00 |
| W. F. Brenizer Co..... | .62 | 14.00 | 21.50 | 8.75 | 9.10 | 13,481.00 |
| R. J. Beall Construction Co..... | .85 | 18.00 | 24.00 | 10.50 | 10.00 | 15,991.00 |

Schedule of proposals for constructing sewer in Massachusetts avenue, between Waterside drive and Observatory circle.

[Received January 15, 1908.]

| Bidder. | Excavation (per cubic yard). | Sewer brick masonry (per cubic yard). | 15-inch diameter pipe (per linear foot). | 12-inch diameter pipe (per linear foot). | 10-inch diameter pipe (per linear foot). | Total cost. |
|----------------------------------|------------------------------------|---|--|--|--|----------------|
| E. G. Gummel..... | \$0.60 | \$14.00 | \$0.69 | \$0.55 | \$0.48 | \$4,393.75 |
| W. F. Brenizer Co..... | .78 | 15.00 | .92 | .80 | .65 | 5,698.70 |
| R. J. Beall Construction Co..... | .83 | 16.00 | .97 | .85 | .80 | 6,068.45 |

Schedule of proposals for constructing sewer in Fortieth street, between Van Ness and Yuma streets and in Wisconsin avenue between Van Ness street and River road.

[Received February 7, 1908.]

| Bidder. | Excavation (per cubic yard). | Sewer brick masonry (per cubic yard). | 21-inch diameter pipe (per linear foot). | 18-inch diameter pipe (per linear foot). | 15-inch diameter pipe (per linear foot). | 12-inch diameter pipe (per linear foot). | Total cost. |
|--------------------------------|------------------------------------|---|---|---|---|---|----------------|
| The Warren F. Brenizer Co..... | \$0.66 | \$13.50 | \$1.06 | \$0.97 | \$0.83 | \$0.71 | \$5,162.00 |
| E. G. Gummel..... | .80 | 18.00 | 1.28 | 1.18 | 1.04 | .88 | 6,348.00 |

Schedule of proposals for constructing sewer in valley of Broad and Soapstone branches, between Rock Creek and Thirtieth street.

[Received March 2, 1908.]

| Bidder. | Excavation. | Sewer brick masonry. | Rock excavation. | 21-inch diameter pipe. | 18-inch diameter pipe. | Total cost. |
|----------------------------------|-------------|----------------------------|------------------|------------------------------|------------------------------|----------------|
| E. G. Gummel..... | \$0.70 | \$14.00 | \$4.00 | \$0.93 | \$0.85 | \$7,018.00 |
| W. F. Brenizer Co..... | .65 | 16.00 | 3.50 | 1.19 | 1.06 | 7,544.00 |
| R. J. Beall Construction Co..... | .89 | 19.00 | 4.00 | 1.26 | 1.18 | 8,875.00 |

Schedule of proposals for constructing service sewers in streets of Ivy City subdivision.

[Received March 9, 1908.]

| Bidder. | Excavation (per cubic yard). | Sewer brick masonry (per cubic yard). | 24-inch diameter pipe sewer (per lin- ear foot). | 18-inch diameter pipe sewer (per lin- ear foot). | 15-inch diameter pipe sewer (per lin- ear foot). | 12-inch diameter pipe sewer (per lin- ear foot). | Total cost. |
|----------------------------------|------------------------------------|---|---|---|---|---|----------------|
| The W. F. Brenizer Co..... | \$0.63 | \$14.00 | \$1.24 | \$0.91 | \$0.85 | \$0.69 | \$8,376.90 |
| E. G. Gummel..... | .70 | 14.00 | 1.10 | .90 | .75 | .65 | 8,425.00 |
| R. J. Beall Construction Co..... | .82 | 15.00 | 1.20 | .98 | .86 | .72 | 9,519.00 |
| J. A. Coyle..... | .75 | 18.00 | 1.20 | 1.10 | 1.00 | .75 | 9,611.00 |

Schedule of proposals for constructing sewer in Sixth street NW., between Maine and Missouri avenues.

[Received March 16, 1908.]

| Bidder. | Excavation (per cubic yard). | Red brick masonry (per cubic yard). | Vitrified brick masonry (per cubic yard). | Concrete masonry "B" (per cubic yard). | Concrete masonry "C" (per cubic yard). | 6-inch diameter pipe (per linear foot). | Total cost. |
|----------------------------------|------------------------------|-------------------------------------|---|--|--|---|-------------|
| E. G. Gummel..... | \$0.90 | \$16.00 | \$22.00 | \$7.36 | \$7.81 | \$0.20 | \$6,118.75 |
| W. F. Brenizer Co..... | 1.10 | 13.50 | 21.00 | 7.90 | 7.45 | .30 | 6,580.25 |
| Cranford Paving Co..... | 1.49 | 17.00 | 21.00 | 7.90 | 7.50 | .20 | 7,588.90 |
| R. J. Beall Construction Co..... | 1.28 | 15.00 | 22.50 | 9.25 | 8.75 | .40 | 7,595.05 |
| James A. Coyle..... | 1.40 | 16.00 | 24.00 | 8.50 | 7.75 | .25 | 7,640.20 |

Schedule of proposals for constructing south branch of Water and L streets intercepting sewer in James Creek Valley.

[Received April 20, 1908.]

| Bidder. | Excavation (per cubic yard). | Brick masonry (per cubic yard). | 24-inch pipe sewer (per linear foot). | 18-inch pipe sewer (per linear foot). | 15-inch pipe sewer (per linear foot). |
|----------------------------|------------------------------|---------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| E. G. Gummel..... | \$1.00 | \$13.00 | \$1.08 | \$0.89 | \$0.73 |
| Warren F. Brenizer Co..... | 1.35 | 15.50 | 1.20 | .98 | .90 |

Schedule of proposals for construction of portion of east side intercepting sewer.

[Received April 27, 1908.]

| Bidder. | Ordinary excavation. | Em-bankment in place. | Sewer brick masonry. | Vitrified brick masonry. | Concrete masonry. | 12-inch sewer pipe. | 6-inch sub-drain. | Tunnel section. | Total cost. |
|------------------------|----------------------|-----------------------|----------------------|--------------------------|-------------------|---------------------|-------------------|-----------------|-------------|
| W. F. Brenizer Co..... | \$0.65 | \$0.30 | \$14.00 | \$21.00 | \$8.50 | \$0.73 | \$0.35 | \$2,900.00 | \$16,269.00 |
| E. G. Gummel..... | 1.00 | .25 | 18.00 | 23.00 | 9.00 | 1.00 | .30 | 3,700.00 | 19,691.00 |

Schedule of proposals for sewer in Fulton street, between Arizona avenue and Tunlaw road, and in Tunlaw road between Fulton street and a point 650 feet west of Thirty-ninth street.

[Received April 29, 1908.]

| Bidder. | Excavation. | Sewer brick masonry. | Federal brick masonry. | Concrete masonry "D." | Total cost sewer A. |
|------------------------|-------------|----------------------|------------------------|-----------------------|---------------------|
| W. F. Brenizer Co..... | \$0.85 | \$15.00 | \$18.00 | \$9.00 | \$4,927.50 |
| Jas. A. Coyle..... | .90 | 18.00 | 22.00 | 9.00 | 5,289.00 |
| E. G. Gummel..... | 1.00 | 18.00 | 20.00 | 10.00 | 5,594.00 |
| Lyons Bros..... | 1.25 | 22.00 | 25.00 | 12.00 | 6,873.00 |

Schedule of proposals for constructing sewer in Tunlaw road, between Thirty-ninth street and a point west of Thirty-ninth street, and in Thirty-ninth street between Tunlaw road and Fulton street.

[Received April 29, 1908.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 15-inch diameter pipe. | Total cost sewer B. |
|------------------------|------------------|----------------------------|------------------------------|------------------------|
| James A. Coyle..... | \$0.64 | \$16.00 | \$0.95 | \$1,824.10 |
| E. G. Gummel..... | 1.00 | 18.00 | 1.00 | 2,306.00 |
| W. F. Brenizer Co..... | 1.10 | 15.00 | .95 | 2,336.50 |
| Lyons Bros..... | 1.25 | 18.00 | 1.30 | 2,876.00 |

Proposals for sewer in Thirty-ninth street, between Fulton and Garfield streets, and block 1813 Cathedral Heights, and in Garfield street between Thirty-eighth and Thirty-ninth streets.

[Received April 29, 1908.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 12-inch diameter pipe. | Total cost sewer C. |
|------------------------|------------------|----------------------------|------------------------------|------------------------|
| James A. Coyle..... | \$0.62 | \$16.00 | \$0.70 | \$1,423.80 |
| E. G. Gummel..... | .80 | 16.00 | .70 | 1,566.00 |
| W. F. Brenizer Co..... | 1.00 | 16.00 | .90 | 1,936.00 |
| Lyons Bros..... | .90 | 18.00 | 1.20 | 2,199.00 |

Schedule of proposals for constructing sewer in Wisconsin avenue, between Thirty-seventh street and a point north of Garfield street, and in Fulton street between Wisconsin avenue and Thirty-ninth street, and in Thirty-eighth street between Fulton and Garfield streets, and in Garfield street between Wisconsin avenue and Thirty-eighth streets.

[Received April 29, 1908.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 18-inch diameter pipe. | 15-inch diameter pipe. | 12-inch diameter pipe. | Total cost sewer D. |
|---------------------|------------------|----------------------------|------------------------------|------------------------------|------------------------------|------------------------|
| James A. Coyle..... | \$0.60 | \$14.00 | \$1.00 | \$0.90 | \$0.70 | \$5,657.00 |
| E. G. Gummel..... | .80 | 16.00 | 1.00 | .90 | .70 | 6,471.00 |
| W. F. Brenizer..... | .90 | 15.00 | 1.00 | .95 | .85 | 7,014.50 |
| Lyons Bros..... | .95 | 20.00 | 1.18 | 1.13 | 1.08 | 7,989.40 |

Schedules of proposals for constructing sewers.

[Received May 11, 1908.]

A.

[Emerson street, between Arkansas and Iowa avenues.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 12-inch diameter pipe. | Total cost. |
|------------------------|------------------|----------------------------|------------------------------|-------------|
| E. G. Gummel..... | \$0.70 | \$14.00 | \$0.70 | \$1,904.00 |
| W. F. Brenizer Co..... | .95 | 15.00 | .80 | 2,361.00 |

B.

[Emerson street, between Arkansas and Brightwood avenues.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 12-inch diameter pipe. | Total cost. |
|------------------------|------------------|----------------------------|------------------------------|-------------|
| E. G. Gummel..... | \$0.70 | \$14.00 | \$0.70 | \$896.00 |
| W. F. Brenizer Co..... | .95 | 15.00 | .80 | 1,100.85 |

Schedules of proposals for constructing sewers—Continued.

C.

[Brightwood avenue, between Emerson and Farragut streets.]

| Bidder. | Excava- tion. | Sewer brick masonry. | 12-inch diameter pipe. | Total cost. |
|------------------------|------------------|----------------------------|------------------------------|-------------|
| E. G. Gummel..... | \$0.70 | \$14.00 | \$0.70 | \$630.70 |
| W. F. Brenizer Co..... | .95 | 15.00 | .80 | 755.45 |

Schedule of proposals for constructing sewer in Arizona avenue at intersection of Massachusetts avenue.

[Received May 18, 1908.]

| Bidder. | Excava- tion (cubic yards). | Sewer brick masonry (cubic yards). | Vitrified brick masonry (cubic yards). | Concrete masonry "B." | Concrete masonry "C." | Total cost. |
|------------------------|--------------------------------------|--|--|-----------------------------|-----------------------------|----------------|
| W. F. Brenizer Co..... | \$0.50 | \$14.00 | \$21.00 | \$8.75 | \$8.25 | \$3,206.25 |
| E. G. Gummel..... | .50 | 18.00 | 23.00 | 9.65 | 9.45 | 3,027.75 |

Schedule of proposals for paving discharge channel at façade for boundary sewer.

[Received June 8, 1908.]

| Bidder. | Price per square foot. | Bidder. | Price per square foot. |
|----------------------------|------------------------------|-------------------------|------------------------------|
| Warren F. Brenizer Co..... | \$0.50 | Cranford Paving Co..... | \$0.89 |

Schedule of proposals for constructing sewer in Macomb street NW., between Arizona avenue and a point 400 feet east of Arizona avenue.

[Received June 8, 1908.]

| Bidder. | Ordinary excava- tion. | Federal brick masonry. | Concrete masonry "B." | Total cost. |
|-----------------------------|------------------------------|------------------------------|-----------------------------|-------------|
| W. F. Brenizer Co..... | \$0.90 | \$18.50 | \$8.50 | \$2,092.00 |
| The Cranford Paving Co..... | 1.90 | 19.20 | 10.80 | 2,892.00 |

Schedule of proposals for constructing sewer in Beach drive, Piney Branch, to Pierce Mill road.

[Received June 15, 1908.]

| Bidder. | Excava- tion (cubic yard). | Red brick masonry (cubic yard). | 24-inch diameter pipe, sewer (linear feet). | Total cost. |
|------------------------|----------------------------------|--|---|-------------|
| W. F. Brenizer Co..... | \$0.90 | \$15.00 | \$1.30 | \$7,347.00 |
| E. J. Cartright..... | .95 | 16.00 | 1.25 | 7,394.00 |
| E. G. Gummel..... | 1.20 | 15.00 | 1.25 | 8,181.00 |

Schedule of proposals for sewer construction in Broad Branch road and southward.

[Received June 15, 1908.]

| Bidder. | Excava- tion (cubic yard). | Red brick masonry (cubic yard). | 24-inch diameter pipe (linear feet). | Total cost. |
|----------------------------------|----------------------------------|--|---|----------------|
| E. G. Gummel..... | \$1.20 | \$15.00 | \$1.20 | \$3,030.00 |
| E. J. Cartright..... | .90 | 16.00 | 1.25 | 2,810.00 |
| R. J. Beall Construction Co..... | .95 | 16.50 | 1.40 | 3,075.00 |
| W. F. Brenizer Co..... | 1.25 | 15.00 | 1.50 | 3,500.00 |

Schedule of proposals for constructing sewer in Arizona avenue and a point north of Canal road.

[Received June 15, 1908.]

| Bidder. | Excava- tion. | Red brick masonry. | Vitrified brick masonry. | Concrete masonry. "B." | Concrete masonry. "C." | Rock. | Total cost. |
|----------------------------------|------------------|-----------------------|--------------------------------|------------------------------|------------------------------|--------|----------------|
| R. J. Beall Construction Co..... | \$0.80 | \$14.75 | \$19.75 | \$8.20 | \$7.75 | \$3.50 | \$4,136.25 |
| Cranford Paving Co..... | .95 | 18.00 | 22.50 | 9.50 | 9.10 | 3.40 | 4,787.50 |
| W. F. Brenizer Co..... | 1.25 | 16.00 | 23.00 | 11.25 | 10.75 | 3.50 | 5,288.75 |

Schedule of proposals for sewer construction in Twenty-fourth street, between M and N streets NW.

[Received June 15, 1908.]

| Bidder. | Excava- tion. | Red brick masonry. | 15-inch pipe. | 12-inch pipe. | Total cost. |
|----------------------------------|------------------|-----------------------|------------------|------------------|----------------|
| E. G. Gummel..... | \$1.50 | \$16.00 | \$0.90 | \$0.80 | \$1,147.00 |
| R. J. Beall Construction Co..... | .80 | 15.00 | .85 | .75 | 1,215.50 |
| W. F. Brenizer Co..... | .95 | 15.00 | .85 | .75 | 1,320.50 |

Schedule of proposals for sewer construction in Cleveland Park, sewer B.

[Received June 15, 1908.]

| Bidder | Excava- tion. | Red brick masonry. | Brick masonry. | Concrete masonry B. | 24-inch diameter pipe. | Total cost. |
|----------------------------------|------------------|--------------------------|-------------------|---------------------------|------------------------------|----------------|
| Warren F. Brenizer Co..... | \$3.80 | \$14.00 | \$18.00 | \$11.00 | \$1.30 | \$2,300.00 |
| R. J. Beall Construction Co..... | 1.15 | 16.50 | 22.00 | 10.50 | 1.35 | 2,674.00 |
| E. J. Cartright..... | 1.20 | 16.00 | 18.00 | 8.75 | 1.40 | 2,561.00 |

Schedule of proposals for sewer construction in Connecticut avenue, between Kingle road and Newark street, sewer A.

[Received June 15, 1908.]

| Bidder. | Excava- tion. | Red brick masonry. | Federal brick masonry. | Concrete masonry B. | 24-inch diameter pipe sewer. | Total cost. |
|----------------------------------|------------------|--------------------------|------------------------------|---------------------------|---------------------------------------|----------------|
| Warren F. Brenizer Co..... | \$0.70 | \$14.00 | \$18.00 | \$10.00 | \$1.35 | \$2,205.50 |
| R. J. Beall Construction Co..... | .90 | 16.50 | 22.00 | 10.50 | 1.35 | 2,491.50 |
| E. J. Cartright..... | 1.20 | 16.00 | 18.00 | 8.75 | 1.40 | 2,748.00 |

Schedule of proposals for sewer construction.

[Received June 15, 1908.]

SEWER A.

[Blagden avenue.]

| Bidder. | Excava- tion (cubic yard). | Red brick masonry (cubic yard). | 18-inch diameter pipe (linear foot). | Total cost. |
|----------------------------------|----------------------------------|--|---|-------------|
| James A. Coyle..... | \$0.70 | \$18.00 | \$1.19 | \$7,130.00 |
| W. F. Brenizer Co..... | .65 | 14.00 | .99 | 6,120.00 |
| R. J. Beall Construction Co..... | .70 | 16.50 | 1.15 | 6,947.50 |
| E. G. Gummel..... | .79 | 15.50 | 1.05 | 6,802.50 |
| E. J. Cartright..... | .74 | 16.00 | 1.05 | 6,660.00 |
| Lyons Bros..... | .85 | 18.00 | 1.15 | 7,420.00 |

SEWER B.

[Blagden avenue and Sixteenth street extended.]

| Bidder. | Excava- tion (cubic yard). | Red brick masonry (cubic yard). | 18-inch diameter pipe (linear foot). | Total cost. |
|----------------------------------|----------------------------------|--|---|-------------|
| James A. Coyle..... | \$0.70 | \$18.00 | \$1.19 | \$4,030.00 |
| W. F. Brenizer Co..... | .70 | 14.00 | .99 | 3,590.00 |
| R. J. Beall Construction Co..... | .70 | 16.50 | 1.15 | 3,935.00 |
| E. G. Gummel..... | .79 | 15.50 | 1.05 | 3,914.00 |
| E. J. Cartright..... | .74 | 16.00 | 1.05 | 3,814.00 |
| Lyons Bros..... | .85 | 18.00 | .98 | 3,925.00 |

Schedule of bids for sewer construction in Second street NE., between F and G streets.

[Received June 15, 1908.]

| Bidder. | Excava- tion (cubic yard). | Red brick masonry (cubic yard). | Vitrified brick masonry (cubic yard). | Concrete masonry (cubic yard). | Total cost. |
|----------------------------|----------------------------------|---|---|---|----------------|
| Warren F. Brenizer Co..... | \$2.00 | \$16.00 | \$23.00 | \$11.00 | \$5,433.00 |
| E. G. Gummel..... | 1.59 | 20.00 | 24.00 | 9.00 | 4,626.30 |

Schedule of proposals for constructing sewer in Massachusetts avenue extended, between Observatory circle and Wisconsin avenue.

[Received June 15, 1908.]

| Bidder. | Excava- tion. | Red brick masonry. | 12-inch diameter pipe. | Total amount. |
|----------------------------------|------------------|-----------------------|------------------------------|------------------|
| Warren F. Brenizer Co..... | \$0.95 | \$16.00 | \$0.80 | \$5,274.50 |
| James A. Coyle..... | .70 | 20.00 | .75 | 4,467.50 |
| R. J. Beall Construction Co..... | .74 | 15.50 | .74 | 4,481.50 |
| E. G. Gummel..... | 1.00 | 16.00 | .75 | 5,284.50 |
| Lyons Bros..... | .88 | 16.00 | 1.00 | 5,618.00 |

Schedule of proposals for sewer in Nichols avenue, between Howard and Sumner avenues.

[Received June 15, 1908.]

| Bidder. | Excavation. | Red brick masonry. | 15-inch diameter pipe. | 12-inch diameter pipe. | Total cost. |
|----------------------------|-------------|--------------------|------------------------|------------------------|-------------|
| E. G. Gummel..... | \$1.50 | \$16.00 | \$1.25 | \$1.10 | \$3,199.50 |
| Warren F. Brenizer Co..... | .95 | 15 00 | .85 | .75 | 2,157.00 |

Schedule of proposals for constructing sewer in Irving street, between Brightwood avenue and Sherman avenue, and in Brightwood avenue, between Irving and Kenyon streets.

[Received June 15, 1908.]

| Bidder. | Excavation. (cubic yard). | Red brick masonry (cubic yard). | 18-inch diameter pipe (linear foot). | 15-inch diameter pipe (linear foot). | 12-inch diameter pipe (linear foot). | Total cost. |
|----------------------------------|---------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-------------|
| E. G. Gummel..... | \$1.00 | \$15.00 | \$1.00 | \$0.90 | \$0.80 | \$2,259.00 |
| R. J. Beall Construction Co..... | 1.00 | 15.00 | 1.00 | .90 | .80 | 2,259.00 |
| W. F. Brenizer Co..... | .95 | 14.00 | .90 | .85 | .75 | 2,123.00 |

Schedule of proposals for constructing sewers in Delafield street NW., between Arkansas and Iowa avenues, and in Iowa avenue NW., between Delafield and Emerson streets.

[Received June 22, 1908.]

| Bidder. | Excavation. | Sewer brick masonry. | 12-inch diameter sewer pipe. | 10-inch diameter sewer pipe. | Total cost. |
|----------------------------------|-------------|----------------------|------------------------------|------------------------------|-------------|
| R. J. Beall Construction Co..... | \$0.65 | \$15.00 | \$0.70 | \$0.65 | \$1,567.00 |
| Jas. A. Coyle..... | .80 | 16.00 | .70 | .65 | 1,736.00 |
| E. G. Gummel..... | .90 | 15.00 | .70 | .70 | 1,846.00 |

Schedule of proposals for construction of Fourth street SE. relief sewer.

[Received June 29, 1908.]

| Bidder. | Excavation. | Sewer brick masonry. | Vitrified brick masonry. | Concrete masonry "D." | Total cost. |
|----------------------------------|-------------|----------------------|--------------------------|-----------------------|-------------|
| James A. Coyle..... | \$0.79 | \$16.00 | \$22.00 | \$7.95 | \$5,486.75 |
| Warren F. Brenizer Co..... | 1.00 | 14.00 | 20.00 | 7.75 | 5,736.25 |
| E. G. Gummel..... | 1.03 | 13.68 | 19.68 | 7.77 | 5,781.33 |
| R. J. Beall Construction Co..... | 1.08 | 14.50 | 19.50 | 8.35 | 6,061.25 |

PROPOSALS FOR GRADING.

Schedule of proposals for grading Albemarle street.

[Received September 3, 1907.]

| Bidder. | Price per cubic yard. | Bidder. | Price per cubic yard. |
|--------------------------------|-----------------------|-------------------|-----------------------|
| E. G. Gummel..... | \$0.44 | G. B. Mullin..... | \$0.53 1/2 |
| The Warren F. Brenizer Co..... | .50 | Geo. Hyman..... | .56 |

Schedule of proposals for filling the approaches to the Anacostia Bridge.

[Received September 14, 1907.]

| Bidder. | Price. | Amount. | Bidder. | Price. | Amount. |
|-------------------------------|---------|-------------|-------------------|--------|-------------|
| The Warren F. Brenizer Co.... | \$0.305 | \$39,955.00 | Jas J. Overn..... | \$0.36 | \$47,160.00 |
| George Hyman..... | .319 | 41,789.00 | B. B. Gonder..... | .40 | 52,400.00 |
| Penn Bridge Co..... | .3489 | 45,705.90 | | | |

Schedule of proposals for grading Massachusetts avenue extended and for approaches to viaduct on Monroe street NE.

[Received June 13, 1908.]

| Bidder. | Massachusetts avenue. | Monroe street. | Bidder. | Massachusetts avenue. | Monroe street. |
|---------------------|-----------------------|----------------|------------------------|-----------------------|----------------|
| E. G. Gummel..... | \$0.28 | \$0.33 | E. J. Cartright..... | \$0.38 | \$0.60 |
| C. C. Magruder..... | | .35 | W. F. Brenizer Co..... | .29 | |
| J. B. Latimer..... | | .385 | G. B. Mullin..... | .34 | |

PROPOSALS FOR BUILDING REPAIRS, ETC.

Schedule of proposals for furnishing duplex steam pump and resetting old pump, etc., in engine or dynamo room, power house, Blue Plains.

[Received August 29, 1907.]

| Bidder. | Amount. |
|------------------------------------|----------|
| National Electrical Supply Co..... | \$923.00 |

Schedule of proposals to lay tile floor in engine room at sewerage pumping station.

[Received March 2, 1908.]

| Bidder. | Price per square foot. | Total cost. | Bidder. | Price per square foot. | Total cost. |
|-------------------------|------------------------|-------------|-----------------|------------------------|-------------|
| American Mosaic Co..... | \$0.08 | \$960.00 | John McVey..... | \$0.19 | \$2,280.00 |
| Thompson & McIver..... | .12 | 1,440.00 | | | |

Schedule of proposals for platforms and stairways, Langdon School addition, Langdon, D. C.

[Received May 23, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|----------|--------------------|----------|
| C. A. Schneiders Sons..... | \$538.00 | Fred J. White..... | \$734.00 |
| Chas. White & Co..... | 793.00 | | |

Schedules of proposals for equipping stairways of Franklin School.

[Received June 6, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|-------------------------------|----------|------------------------------------|----------|
| American Safety Tread Co..... | \$534.24 | The Universal Safety Tread Co..... | \$518.00 |

Schedule of proposals for metal ceilings at Arthur School.

[Received June 18, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------------|-----------|--------------------|-----------|
| Berger Manufacturing Co..... | \$850. 00 | Barber & Ross..... | \$802. 00 |

PROPOSALS FOR PAVING.

Schedule of proposals for paving First street NE., between H street and New York avenue.

[Received May 2, 1908.]

| Bidder. | 6-inch concrete base. | 6-inch gravel base. | Cleaning and laying granite block pavement. | Relaying granite block pavement. | Trim grading and rolling. | Total cost. |
|----------------------------------|-----------------------|---------------------|---|----------------------------------|---------------------------|---------------|
| W. F. Brenizer Co..... | \$0. 70 | \$0. 25 | \$0. 58 | \$0. 50 | \$0. 10 | \$13, 475. 00 |
| R. J. Beall Construction Co..... | . 73 | . 20 | . 57 | . 50 | . 10 | 13, 620. 00 |
| Cranford Paving Co..... | . 60 | . 07 | . 65 | . 45 | . 09 | 13, 060. 00 |
| Brennan Construction Co..... | . 59 | . 20 | . 60 | . 50 | . 10 | 12, 660. 00 |
| R. E. Boiseau..... | . 58 | . 22 | . 57 | . 50 | . 17 | 12, 980. 00 |

PROPOSALS FOR SIDEWALKS.

Schedule of proposals for laying cement sidewalks.

[Opened September 21, 1907.]

| Bidder. | Class A (per square yard). | Class B (per square yard). | Total cost. |
|----------------------------------|----------------------------|----------------------------|---------------|
| Colburn Bros..... | | | |
| R. J. Beall Construction Co..... | \$1. 05 | \$1. 18 | \$74, 800. 00 |
| The Cranford Paving Co..... | 1. 075 | 1. 165 | 76, 150. 00 |
| Rudolph S. Blome Co..... | 1. 139 | 1. 19 | 80, 240. 00 |
| | 1. 19 | 1. 32 | 84, 600. 00 |

Schedule of proposals for laying cement sidewalks on Rhode Island avenue NE., under Baltimore and Ohio viaduct.

[Received November 8, 1907.]

| Bidder. | Price per square yard. | Bidder. | Price per square yard. |
|----------------------------------|------------------------|--------------------|------------------------|
| R. J. Beall Construction Co..... | \$1. 275 | R. E. Boiseau..... | \$1. 56 |
| Fred Drew..... | 1. 30 | | |

Schedule of proposals for laying cement sidewalk around reservation 116 and Jefferson School.

[Received November 16, 1907.]

| Bidder. | Price per square yard. | Bidder. | Price per square yard. |
|----------------------------------|------------------------|---------------------|------------------------|
| R. J. Beall Construction Co..... | \$1. 49 | R. S. Blome Co..... | \$1. 52 |
| Cranford Paving Co..... | 1. 65 | | |

Schedule of proposals for laying cement sidewalks.

[Received June 30, 1908.]

| Bidder. | Class A. | Class B. | Total. |
|-----------------------------------|----------|----------|-------------|
| Colburn Bros..... | \$0.95 | \$1.18 | \$38,800.00 |
| R. J. Beall Construction Co. | .994 | 1.164 | 71,280.00 |
| Cranford Paving Co..... | 1.00 | 1.15 | 71,500.00 |
| Drew & Shehan..... | 1.0475 | 1.15 | 74,350.00 |
| R. S. Blome Co..... | 1.08 | 1.17 | 76,500.00 |

PROPOSALS FOR BRIDGE CONSTRUCTION.

Schedule of proposals for constructing bridge on line of Monroe street, over Baltimore and Ohio Railroad, Brookland, D. C.

[Opened August 10, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|-----------------------|-------------|---------------------------------------|-------------|
| C. B. Clark & Co..... | \$29,110.00 | Penn Bridge Co..... | \$33,374.00 |
| Jas. J. Overn..... | 31,840.00 | Potomac Concrete Construction Co..... | 31,861.00 |

PROPOSALS FOR OIL TANK.

Schedule of proposals for oil tank for property yard at Second and N streets NE.

[Received May 12, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|----------|---------------------|----------|
| G. W. Forsberg..... | \$699.00 | Connery & Co..... | \$850.00 |
| Thos. C. Brashears Co..... | 784.00 | Tippett & Wood..... | 896.00 |
| J. E. Hurley..... | 810.00 | | |

PROPOSALS FOR FURNISHING AND HAULING CONSTRUCTION MATERIAL.

Schedule of proposals for furnishing 6 by 20 inch granite curbing.

[Received November 16, 1907.]

| Bidder. | 6 by 20 inch straight (per linear foot). | 6 by 20 inch circular (per linear foot). |
|--------------------------|---|---|
| Brantley Granite Co..... | \$0.92 | \$1.25 |
| Davidson Granite Co..... | 1.00 | 1.50 |
| Georgia Granite Co..... | .99 | 1.30 |

Schedule of bids for furnishing 6 by 20 inch granite curbing.

[Received December 26, 1907.]

| Bidder. | 6 by 20 inch straight (per foot). | 6 by 20 inch circular (per foot). | Amount. |
|--|---|---|-------------|
| W. P. Evans Lithonia, Ga..... | \$0.97 | \$2.00 | \$14,640.00 |
| Wise Granite Co., Wise, N. C..... | .99 | 1.30 | 13,830.00 |
| Georgia Granite Co. Atlanta, Ga..... | .99 | 1.30 | 13,830.00 |
| Bragdon, Fernald & Gordon, Franklin, Me..... | 1.20 | 1.60 | 16,800.00 |

Schedule of proposals, for furnishing terra-cotta sewer pipe.

[Received February 25 1908.]

| Bidder. | 12-inch (price per foot). | 18-inch (price per foot). | 21-inch (price per foot). | Total cost. |
|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|-------------|
| American Sewer Pipe Co..... | \$0.26 | \$0.44 | \$0.6425 | \$6,105.00 |
| National Fire Proofing Co..... | .28 | .476 | .70 | 6,608.00 |
| Lamond Bros..... | .25 | | | 1,250.00 |
| A. McB Porter..... | .25 | .425 | .63 | 5,910.00 |
| Patton Clay Manufacturing Co..... | .27 | .459 | .675 | 6,372.00 |
| Wm. Wirt Clarke & Son..... | .25 | .425 | .625 | 5,960.00 |

Schedule of proposals for furnishing granite curbing.

[Received May 14, 1908.]

| Bidder. | Price per foot. | | | |
|--------------------------------|-------------------|-----------|--------------------|-----------|
| | 8 by 8 inch curb. | | 6 by 20 inch curb. | |
| | Straight. | Circular. | Straight. | Circular. |
| Bragdon, Fernald & Gordon..... | \$0.85 | \$1.15 | \$1.15 | \$1.75 |
| Georgia Granite Co..... | .83 | 1.02 | 1.04 | 1.35 |
| Wise Granite Co..... | .88 | 1.08 | 1.04 | 1.29 |
| Feeney & Atherton..... | .87 | 1.09 | | |
| W. P. Evans..... | .80 | 1.25 | .95 | 1.35 |
| Davidson Granite Co..... | .81 | 1.35 | 1.00 | 1.35 |

Schedule of proposals for furnishing terra-cotta sewer pipe.

[Received May 14, 1908.]

| Bidder. | Price per foot. | | | | | | | |
|--------------------------------|-----------------|---------|----------|----------|----------|----------|----------|----------|
| | 6-inch. | 8-inch. | 10-inch. | 12-inch. | 15-inch. | 18-inch. | 21-inch. | 24-inch. |
| American Sewer Pipe Co..... | \$0.07½ | \$0.11½ | \$0.17½ | \$0.239 | \$0.32½ | \$0.40½ | \$0.5975 | \$0.7775 |
| Clyde C. Lamond..... | .07 | .12 | .175 | | | | | |
| Wm. Wirt Clarke & Son..... | .0705 | .1275 | .1912 | .255 | .3442 | .4335 | .6375 | .8287 |
| National Fire Proofing Co..... | .075 | .125 | .1875 | .25 | .3375 | .425 | .625 | .8125 |

Schedule of proposals for furnishing vitrified paving blocks.

[Received May 14, 1908.]

| Bidder. | Price per thou- sand. | Bidder. | Price per thou- sand. |
|-----------------------------------|-----------------------------|---------------------------|-----------------------------|
| American Sewer Pipe Co..... | \$25.20 | C. P. Mayer Brick Co..... | \$22.20 |
| Metropolitan Paving Brick Co..... | 30.00 | Jas. M. Porter..... | 20.80 |
| Mack Manufacturing Co..... | 24.31 | | |

Schedule of proposal for furnishing asphalt paving blocks.

[Received May 14, 1908.]

| Bidder. | Amount per thou- sand. |
|---|------------------------------|
| Washington Asphalt Block and Tile Co..... | \$62.00 |

Schedule of proposals for furnishing miscellaneous castings.

[Received May 14, 1908.]

| Miscellaneous castings. | Deitrich Bros. | Montford Machinery Casting Co. | Lynchburg Foundry Co. | Stuart R. Carr & Co. | J. T. Springmann, Jr., & Bro. | F. J. White. |
|---|----------------|--------------------------------|-----------------------|----------------------|-------------------------------|-------------------|
| Alley grates and frames, No. 1, complete .. | \$10.00 | \$16.24 | \$9.40 | \$8.10 | \$11.50 | \$9.94 |
| Manhole frames and covers: | | | | | | |
| 2 inches in diameter— | | | | | | |
| A..... | 2.90 | 6.27 | 3.80 | 2.68 | 3.40 | 3.09 |
| B..... | 1.50 | 2.15 | 2.52 | 1.43 | 1.74 | 1.48 |
| C..... | 2.25 | 1.69 | 2.00 | 1.95 | 2.20 | 1.73 |
| 3 inches in diameter— | | | | | | |
| A..... | 6.50 | 8.36 | 5.60 | 7.95 | 9.00 | 8.90 |
| B..... | 5.60 | 7.07 | 7.38 | 6.95 | 8.00 | 7.90 |
| Manhole rings, 2 inches in diameter | 1.30 | 2.15 | 1.18 | 1.45 | 1.60 | 1.58 |
| Manhole steps..... | .11 | | .12 | .18 | .15 | .11 ⁰⁰ |
| Valve casings, complete..... | 7.70 | 8.93 | 5.82 | 6.38 | 9.50 | 7.43 |
| Valve casing covers: | | | | | | |
| P. W. pattern..... | 1.00 | 1.24 | 1.50 | 1.17 | 1.95 | 1.41 |
| Filled pattern..... | 1.50 | 1.72 | 5.30 | 1.38 | 1.90 | 1.49 |
| Star pattern..... | 1.15 | 1.33 | .80 | 1.18 | 1.56 | 1.54 |
| Do..... | 1.50 | 1.72 | 2.20 | 1.38 | 1.95 | 1.54 |
| Blueprint 589..... | 1.50 | | | 1.34 | 2.00 | |
| Miscellaneous castings..... | .02 | .025 | .02 | .0295 | .02 ² ₃ | .025 |

| Miscellaneous castings. | Chas. White & Co. | Jno. Mitchell, Jr. | Levi Farmer & Son Iron Works. | J. F. Powers Foundry Co. | New Jersey Foundry and Machine Co. |
|---|-------------------|--------------------|-------------------------------|--------------------------|------------------------------------|
| Alley grates and frames, No. 1, complete .. | \$9.90 | \$9.60 | \$18.40 | \$10.22 | \$5.58 |
| Manhole frames and covers: | | | | | |
| 2 inches in diameter— | | | | | |
| A..... | 3.20 | 3.00 | 5.52 | 3.42 | 3.00 |
| B..... | 1.44 | 1.80 | 2.92 | 2.09 | 1.94 |
| C..... | 1.74 | 1.90 | 3.34 | 1.90 | 1.82 |
| 3 inches in diameter— | | | | | |
| A..... | 8.20 | 6.65 | 11.83 | 7.60 | 5.25 |
| B..... | 8.20 | 6.50 | 11.05 | 6.65 | 6.00 |
| Manhole rings, 2 inches in diameter..... | 1.64 | 1.65 | 2.48 | 1.15 | 1.11 |
| Manhole steps..... | .12 | .15 | | .15 | .11 |
| Valve casings, complete..... | 7.70 | 6.75 | 13.54 | 7.35 | 5.11 |
| Valve casing covers: | | | | | |
| P. W. pattern..... | 1.48 | 1.35 | 2.00 | 1.05 | 1.04 |
| Filled pattern..... | 1.64 | 1.35 | 2.87 | 1.15 | 1.26 |
| Star pattern..... | 1.48 | 1.25 | 2.27 | 1.52 | 1.21 |
| Do..... | 1.48 | 1.30 | 3.32 | 1.55 | 1.72 |
| Blueprint 589..... | 1.64 | 1.20 | 3.60 | 1.56 | 1.29 |
| Miscellaneous castings..... | .04 | .02 ²⁵ | | .0225 | .0175 |

Schedule of proposal for hauling broken stone.

[Received May 14, 1908.]

| Bidder. | Price per cubic yard. | | | |
|---------------------|---------------------------------|------------------------------|--|------------------------------|
| | Not more than 1 mile from dump. | More than 1 mile additional. | From railroad sidings, not more than 1 mile. | More than 1 mile additional. |
| Geo. B. Mullin..... | \$0.34 | \$0.19 | \$0.42 | \$0.19 |

Schedule of proposals for cast-iron water pipe.

[Received June 6, 1908.]

| Bidder. | 3-inch, 5 tons (per ton). | 4-inch, 34 tons (per ton). | 6-inch, 40 tons (per ton). | 8-inch, 922 tons (per ton). | 12-inch, 438 tons (per ton). | Total cost. |
|---|---------------------------------|----------------------------------|----------------------------------|-----------------------------------|------------------------------------|----------------|
| Lynchburg Foundry Co..... | \$29.44 | \$26.44 | \$25.44 | \$24.94 | \$24.94 | \$35,918.16 |
| The Dimmick Pipe Co..... | 25.48 | 25.48 | 25.48 | 25.48 | 25.48 | 36,665.72 |
| United States Cast Iron Pipe and Foundry Co..... | 27.00 | 27.00 | 25.85 | 25.85 | 25.85 | 38,243.00 |
| Camden Iron Works..... | | 28.44 | 27.33 | 27.33 | 27.33 | 39,228.96 |
| John Fox & Co..... | 30.40 | 29.00 | 27.50 | 27.25 | 27.25 | 39,298.00 |
| Central Metal and Supply Co..... | 29.60 | 29.60 | 29.60 | 29.60 | 29.60 | 42,594.40 |

Schedule of proposals for furnishing curb and corporation cocks.

[Received June 27, 1908.]

| Bidder. | Corporation cocks. | | | | | |
|--|----------------------|---------|------------------------|------------------------|---------|------------|
| | $\frac{3}{4}$ -inch. | 1-inch. | 1 $\frac{1}{2}$ -inch. | 1 $\frac{3}{4}$ -inch. | 2-inch. | Total. |
| The Anderson Coupling Co.... | \$0.53 | \$0.84 | \$1.24 | \$1.93 | \$4.10 | \$3,138.00 |
| Glauber Brass Manufacturing Co..... | .66 | 1.04 | ..... | ..... | ..... | 2,604.00 |
| The A. P. Smith Manufactur- ing Co..... | .57 | .92 | 1.30 | 2.00 | 4.20 | 3,342.00 |
| H. Mueller Manufacturing Co.. | .597 | .863 | 1.425 | 2.286 | 4.248 | 3,494.00 |

| Bidder. | Curb cocks. | | | | | | | |
|--|----------------------|---------|------------------------|---------------------------------------|--|------------------|---------------------------------|------------|
| | $\frac{3}{4}$ -inch. | 1-inch. | 1 $\frac{1}{2}$ -inch. | $\frac{3}{4}$ -inch, iron pipe. | $\frac{3}{4}$ -inch, lead and iron. | 1-inch, iron. | 1 $\frac{1}{2}$ -inch, iron. | Total. |
| The Anderson Coupling Co.... | \$0.78 | \$1.25 | \$1.60 | \$0.65 | \$0.65 | \$1.03 | \$1.60 | \$2,910.00 |
| Glauber Brass Manufacturing Co..... | .96 | 1.39 | ..... | .89 | .93 | 1.16 | 1.87 | 3,355.40 |
| The A. P. Smith Manufactur- ing Co..... | .87 | 1.30 | 1.60 | .75 | .75 | 1.25 | 1.60 | 3,209.50 |
| H. Mueller Manufacturing Co.. | .9575 | 1.337 | 1.593 | .78 | .7875 | 1.15 | 1.65 | 3,456.60 |
| | | | | | | | | 6,950.60 |

Schedule of proposals for Portland cement.

[Received June 4, 1908.]

| Bidder. | Canal street cement house. | | Baltimore and Ohio R. R. Co. | | Fourteenth and D streets cement house. | |
|---------------------------------------|-------------------------------|--------|------------------------------------|--------|--|--------|
| | Wood. | Sacks. | Wood. | Sacks. | Wood. | Sacks. |
| Columbia Granite and Dredging Co..... | \$1.59 | \$1.32 | \$1.55 | \$1.28 | \$1.55 | \$1.28 |
| Atlas Portland Cement Co..... | 1.65 | 1.33 | 1.60 | 1.28 | 1.60 | 1.28 |
| National Mortar Co..... | 1.52 | 1.24 | 1.48 | 1.20 | 1.48 | 1.20 |
| Dexter Portland Cement Co..... | 1.65 | 1.63 | 1.60 | 1.58 | 1.60 | 1.58 |
| Grove Lime and Coal Co..... | 1.64 | 1.345 | 1.60 | 1.30 | 1.60 | 1.30 |
| Wm. Wirt Clarke & Son..... | 1.65 | 1.45 | 1.60 | 1.40 | 1.60 | 1.40 |
| Lehigh Portland Cement Co..... | 1.64 | 1.63 | 1.60 | 1.585 | 1.60 | 1.585 |

Schedule of proposals for furnishing red sewer bricks.

[Received June 19, 1908.]

| Deliveries. | New Wash- ington Brick Co. | Frederick Brick Works. | John Miller. | |
|---|----------------------------------|------------------------------|--------------|--------|
| | | | No. 1. | No. 2. |
| City of Washington: | | | | |
| East of Rock Creek..... | \$9.63 | | \$9.00 | \$8.50 |
| West of Rock Creek..... | 10.44 | | 9.90 | 9.40 |
| County of Washington: | | | | |
| East of Eastern Branch..... | 10.54 | | 10.75 | 10.25 |
| West of Rock Creek, 1 mile from Georgetown..... | 11.84 | | 10.70 | 10.20 |
| Between Eastern Branch and Rock Creek, not over 1½ miles from city limits..... | 10.69 | | 10.50 | 10.00 |
| Property yards..... | | \$8.50 | 8.50 | 8.00 |
| Bidder's works..... | 8.63 | 7.00 | 7.75 | 7.25 |
| Haul beyond limits above..... | 1.00 | | 1.00 | 1.00 |

PROPOSALS FOR BUILDING CONSTRUCTION.

Schedule of proposal for constructing stable at Colored Industrial Home School.

[Received July 3, 1907.]

| Bidder. | Amount. |
|-------------------------------------|------------|
| Pavarini & Wyne (Incorporated)..... | \$1,297.00 |

Schedule of proposals for constructing addition to the Petworth School.

[Received September 14, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------|-------------|----------------------|-------------|
| Burgess & Parsons..... | \$23,687.00 | Pavarini & Wyne..... | \$27,459.00 |
| Jos. H. Gibbons..... | 25,200.00 | | |

Schedule of proposals for addition to McKinley Manual Training School.

[Received November 2, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------|--------------|---------------------------|--------------|
| Geo. A. Fuller Co..... | \$115,000.00 | Milton C. Davis..... | \$128,875.00 |
| Pavarini & Wyne..... | 122,200.00 | Thompson Starrett Co..... | 133,927.00 |
| Thos. H. Melton..... | 128,194.00 | Jas. M. Dunn..... | 134,312.00 |

Schedule of proposals for construction of cement storehouse.

[Received November 9, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|-------------------------------------|------------|------------------------|-------------|
| Thos. H. Melton..... | \$7,995.00 | Burgess & Parsons..... | \$10,100.00 |
| W. E. Mooney..... | 9,057.00 | Lyons Broc..... | 11,450.00 |
| Pavarini & Wyne (Incorporated)..... | 9,500.00 | Jos. H. Gibbons..... | 22,700.00 |

170 OPERATIONS OF THE ENGINEER DEPARTMENT, D. C.

Schedule of proposals for construction of stable for water department on Bryant street.

[Received November 9, 1907.]

| Bidder. | Amount. | | Bidder. | Amount. | |
|------------------------|-----------------|-------------|----------------------|-----------------|-------------|
| | Concrete floor. | Wood floor. | | Concrete floor. | Wood floor. |
| T. H. Melton..... | \$23,000.00 | \$21,300.00 | Pavarini & Wyne..... | \$29,800.00 | \$29,300.00 |
| W. E. Mooney..... | 24,885.00 | 23,785.00 | S. J. Brinkley..... | 30,237.00 | 28,290.00 |
| R. T. Humphrey..... | 26,500.00 | 25,300.00 | Boryer & Smith..... | 30,648.00 | 30,000.00 |
| Burgess & Parsons..... | 29,700.00 | 27,200.00 | J. H. Gibbons..... | 31,750.00 | 29,700.00 |

Schedule of proposals for Langdon School addition.

[Received November 16, 1907.]

| Bidder. | Amount. | | Bidder. | Amount. | |
|------------------------|-------------|---------------------|------------------------|-------------|---------------------|
| | Complete. | Alternate proposal. | | Complete. | Alternate proposal. |
| Jos. H. Gibbons..... | \$22,993.00 | \$23,900.00 | M. C. Davis..... | \$24,700.00 | \$25,000.00 |
| A. T. Howison..... | 23,538.00 | 24,038.00 | Robt. T. Humphrey..... | 25,300.00 | 25,750.00 |
| Burgess & Parsons..... | 23,800.00 | 24,300.00 | Pavarini & Wyne..... | 26,900.00 | 27,700.00 |

Schedule of proposals for constructing 8-room school building on lots 1, 21, 22, 23, and 24, square 800.

[Received November 16, 1907.]

| Bidder. | Amount. | | |
|------------------------|-------------|-------------|-------------|
| | Complete. | A. | B. |
| Burgess & Parsons..... | \$49,429.00 | \$49,554.00 | |
| R. T. Humphrey..... | 45,650.00 | 47,825.00 | \$47,650.00 |
| S. J. Brinkley..... | 49,000.00 | 49,300.00 | 50,300.00 |
| J. M. Dunn..... | 47,220.00 | 48,195.00 | 52,495.00 |
| T. H. Melton..... | 50,900.00 | 51,945.00 | 54,065.00 |
| M. C. Davis..... | 51,626.00 | 53,301.00 | 54,276.00 |
| W. E. Mooney..... | 51,975.00 | | |
| Pavarini & Wyne..... | 49,900.00 | 51,100.00 | 51,900.00 |

Schedule of proposals for constructing chemical engine house at Langdon.

[Received November 20, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------|-------------|---------------------|-------------|
| Burgess & Parsons..... | \$16,400.00 | R. T. Humphrey..... | \$16,900.00 |
| J. M. Dunn..... | 16,658.00 | | |

Schedule of proposals for constructing engine and truck house on lot 63, Lanier Heights.

[Received November 20, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------|-------------|------------------------|-------------|
| Thos. H. Melton..... | \$23,547.00 | Burgess & Parsons..... | \$28,700.00 |
| J. M. Dunn..... | 25,460.00 | | |

Schedule of proposals for constructing addition to Emery School.

[Received November 23, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------|-------------|----------------------|-------------|
| J. M. Dunn..... | \$21,533.00 | S. J. Brinkley..... | \$23,700.00 |
| B. B. Knell..... | 21,644.00 | Pavarini & Wyne..... | 23,700.00 |
| R. T. Humphrey..... | 21,900.00 | Thos. H. Melton..... | 25,450.00 |
| Burgess & Parsons..... | 22,965.00 | | |

Schedule of proposals for constructing addition to Eastern Market.

[Received January 25, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------|-------------|-------------------------------------|-------------|
| Milton C. Davis..... | \$23,298.00 | Pavarini & Wyne (Incorporated)..... | \$25,900.00 |
| J. M. Dunn..... | 24,800.00 | Burgess & Parsons..... | 26,165.00 |
| William E. Mooney..... | 24,987.00 | S. J. Brinkley..... | 26,200.00 |
| T. H. Melton..... | 25,330.00 | Borier & Smith..... | 28,642.00 |
| B. B. Knell..... | 25,689.00 | Penn Bridge Co..... | 29,939.00 |

Schedule of proposals for constructing 12-room school building, No. 155, located on lots 46 to 58, square 1038, B street, between Thirteenth and Fourteenth streets S.E.

[Received March 7, 1908.]

| Bidder. | Amount. | Alternate proposals due to additions and deductions. | | | | |
|------------------------|-------------|--|----------|----------|----------|----------|
| | | A. | B. | C. | D. | E. |
| Burgess & Parsons..... | \$98,789.00 | \$250.00 | \$275.00 | \$255.00 | \$145.00 | \$345.00 |
| Geo. A. Fuller Co..... | 96,000.00 | 188.00 | 214.00 | 307.00 | 310.00 | 645.00 |
| W. E. Mooney..... | 91,036.00 | 150.00 | 200.00 | 450.00 | 200.00 | 606.00 |
| M. C. Davis..... | 94,400.00 | 178.00 | 245.00 | 338.00 | 200.00 | 850.00 |
| J. M. Dunn..... | 99,709.00 | 170.00 | 240.00 | 300.00 | 100.00 | 1,000.00 |
| Borier & Smith..... | 105,000.00 | 25.00 | 25.00 | 300.00 | 100.00 | 125.00 |
| C. A. Langley..... | 101,746.00 | 208.00 | 270.00 | 500.00 | 200.00 | 900.00 |
| R. T. Humphrey..... | 105,000.00 | 185.00 | 216.00 | 310.00 | 232.00 | 195.00 |
| Pavarini & Wyne..... | 95,000.00 | 118.77 | 150.00 | 261.00 | 225.00 | 584.00 |
| Weaver & Son..... | 95,938.00 | 115.00 | 190.00 | 275.00 | 125.00 | 400.00 |

| Bidder. | Alternate proposals due to additions and deductions. | | | | | | |
|------------------------|--|------------|------------|----------|----------|------------|----------|
| | F. | G. | H. | I. | J. | K. | L. |
| Burgess & Parsons..... | \$1,000.00 | \$2,500.00 | \$1,100.00 | ..... | \$500.00 | \$1,300.00 | ..... |
| Geo. A. Fuller Co..... | 3,841.00 | 2,883.00 | 1,000.00 | \$250.00 | 688.00 | 60.00 | \$125.00 |
| W. E. Mooney..... | 6,200.00 | 2,300.00 | 500.00 | 2,190.00 | 300.00 | 1,200.00 | 50.00 |
| M. C. Davis..... | 4,000.00 | 2,400.00 | 1,000.00 | 10.00 | ..... | 1,500.00 | 119.00 |
| J. M. Dunn..... | 4,000.00 | 2,000.00 | 1,800.00 | ..... | 50.00 | 1,000.00 | ..... |
| Borier & Smith..... | 1,500.00 | 1,800.00 | 1,200.00 | 240.00 | 400.00 | 475.00 | 100.00 |
| C. A. Langley..... | 4,412.00 | 2,146.00 | 444.00 | 500.00 | 300.00 | 1,450.00 | 160.00 |
| R. T. Humphrey..... | 5,000.00 | 2,900.00 | 600.00 | ..... | ..... | 1,300.00 | 200.00 |
| Pavarini & Wyne..... | 2,000.00 | 1,700.00 | 1,200.00 | ..... | 400.00 | 220.00 | ..... |
| Weaver & Son..... | 3,855.00 | 1,950.00 | 1,000.00 | 1,200.00 | 75.00 | 150.00 | 25.00 |

Schedule of proposals for constructing a 16-room school building, No. 154, located on lots 51 to 61, inclusive, square 2576, Mount Pleasant, District of Columbia.

[Received March 14, 1908.]

| Bidder. | Amount of bid. | Additions and deductions due to alternate propositions. | | | | |
|-------------------------------------|----------------|---|----------|----------|-----------|----------|
| | | A | B. | C. | D. | E. |
| Geo. A. Fuller Co..... | \$97,500.00 | \$200.00 | \$600.00 | \$600.00 | \$250.00+ | ..... |
| Pavarini & Wyne (Incorporated)..... | 99,400.00 | 150.00 | 500.00 | 400.00 | 300.00+ | \$400.00 |
| Burgess & Parsons..... | 99,700.00 | 300.00 | 600.00 | 900.00 | 375.00+ | 300.00 |
| J. L. Parsons..... | 112,733.00 | 100.00 | 200.00 | 500.00 | 371.00+ | 680.00 |
| C. A. Langley..... | 106,686.00 | 100.00 | 500.00 | 350.00 | 250.00+ | ..... |
| M. C. Davis..... | 98,478.00 | 250.00 | 725.00 | 1,000.00 | 370.00+ | 390.00 |
| Thompson & Starrett Co..... | 111,251.00 | 229.00 | 670.00 | 980.00 | 250.00+ | 300.00 |
| Borver & Smith..... | 106,500.00 | 200.00 | 100.00 | 150.00 | 400.00+ | ..... |
| R. T. Humphrey..... | 105,900.00 | 300.00 | 500.00 | 700.00 | 371.00+ | 700.00 |
| J. M. Dunn..... | 105,559.00 | ..... | ..... | ..... | 300.00+ | ..... |

Schedule of proposals for constructing 16-room school building, No. 153, located on Fourth street NW., between W and Bryant streets.

[Received March 26, 1908.]

| Bidder. | Amount. | Alternate bid | Bidder. | Amount. | Alternate bid. |
|------------------------|--------------|---------------|----------------------|--------------|----------------|
| R. T. Humphrey..... | \$108,900.00 | \$109,600.00 | Pavarini & Wyne..... | \$108,400.00 | \$108,000.00 |
| C. J. Cassidy Co..... | 118,800.00 | 120,000.00 | Borver & Smith..... | 116,000.00 | 116,000.00 |
| M. C. Davis..... | 109,449.00 | 108,200.00 | C. A. Langley..... | 116,353.00 | 115,153.00 |
| Weaver & Son..... | 124,640.00 | 123,640.00 | Thos. H. Melton..... | 121,000.00 | 120,900.00 |
| Burgess & Parsons..... | 108,000.00 | 108,600.00 | Jas M. Dunn..... | 111,789.00 | 111,489.00 |
| Geo. A. Fuller Co..... | 112,960.00 | 111,500.00 | | | |

Schedule of proposals for erection of a 4-room addition to N. P. Gage School, No. 143.

[Received April 8, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|------------------------|-------------|-------------------------------------|-------------|
| J. M. Dunn..... | \$20,683.00 | M. C. Davis..... | \$22,795.00 |
| R. P. Humphrey..... | 20,900.00 | Pavarini & Wyne (Incorporated)..... | 25,290.00 |
| Burgess & Parsons..... | 21,397.00 | | |

PROPOSALS FOR PLUMBING.

Schedule of proposals for remodeling plumbing in old almshouse building.

[Received July 24, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|---------------------|----------|-------------------------|----------|
| Edw. J. Harman..... | \$561.00 | Wm. Rothwell & Son..... | \$800.00 |

Schedule of proposals for remodeling the plumbing work in the Berret School building.

[Received August 6, 1907.]

| Bidder. | Amount. | Bidder. | Amount. |
|--------------------------|------------|-------------------------|------------|
| Dunigan Plumbing Co..... | \$2,985.00 | Wm. Rothwell & Son..... | \$3,198.00 |
| A. P. Howison..... | 3,025.00 | | |

Schedule of proposals for repairs to and changes in plumbing at school buildings.

[Received April 23, 1908.]

| Bidder. | Garrison School. | Garrison School amended. | Fillmore School. | Fillmore School amended. |
|----------------------------|------------------|--------------------------|------------------|--------------------------|
| Hutchinson & McCarthy..... | \$3,493.00 | \$3,473.00 | \$3,563.00 | \$3,353.00 |
| Dunigan Plumbing Co..... | 3,600.00 | ..... | 4,260.00 | ..... |
| S. S. Shedd & Bro. Co..... | 3,762.00 | ..... | 3,954.00 | ..... |
| Darnall & Jones..... | 3,576.00 | ..... | 3,848.00 | ..... |
| Wm. Rothwell & Son..... | 4,094.00 | ..... | 4,574.00 | ..... |

Schedule of proposals for repairs to and changes in plumbing at school buildings.

[Received April 23, 1908.]

| Bidder. | Magruder School. | Magruder School alternate. | Pierce School. |
|----------------------------|------------------|----------------------------|----------------|
| Darnall & Jones..... | \$4,138.00 | \$3,945.00 | \$3,087.00 |
| Wm. Rothwell & Son..... | 5,339.00 | 4,539.00 | 3,490.00 |
| Hutchinson & McCarthy..... | 4,493.00 | 4,093.00 | 3,093.00 |
| Dunigan Plumbing Co..... | 4,630.00 | 4,400.00 | 3,500.00 |
| S. S. Shedd & Bro. Co..... | 4,253.00 | 3,968.00 | 3,182.00 |

Schedule of proposals for repairs to and changes in plumbing in the Phillips School.

[Received May 2, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| S. S. Shedd & Bro. Co..... | \$3,595.00 | Jas. Nolan & Sons..... | \$4,017.00 |
| Hutchinson & McCarthy..... | 3,633.00 | Wm. Rothwell & Son..... | 4,314.00 |
| Darnall & Jones..... | 3,763.00 | | |

Schedule of proposals for repairs to and changes in plumbing in Taylor School.

[Received May 2, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| S. S. Shedd & Bro. Co..... | \$3,265.00 | Wm. Rothwell & Son..... | \$3,738.00 |
| Hutchinson & McCarthy..... | 3,393.00 | Jas. Nolan & Sons..... | 3,865.00 |
| Darnall & Jones..... | 3,578.00 | | |

Schedule of proposals for plumbing work in Logan School.

[Received May 2, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| S. S. Shedd & Bro. Co..... | \$3,274.00 | Wm. Rothwell & Son..... | \$3,693.00 |
| Hutchinson & McCarthy..... | 3,373.00 | Jas. Nolan & Sons..... | 3,928.00 |
| Darnall & Jones..... | 3,439.00 | | |

Schedule of proposals for plumbing work in Carberry School.

[Received May 2, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| Hutchinson & McCarthy..... | \$3,073.00 | Wm. Rothwell & Son..... | \$3,242.00 |
| S. S. Shedd & Bro. Co..... | 3,073.00 | James Nolan & Sons..... | 3,714.00 |
| Darnall & Jones..... | 3,128.00 | | |

Schedule of proposals for remodeling plumbing in Polk School.

[Received June 3, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| Hutchinson & McCarthy..... | \$2,887.00 | Wm. Rothwell & Son..... | \$3,133.00 |
| S. S. Shedd & Bro. Co..... | 3,057.00 | Jas. Nolan & Sons..... | 3,440.00 |
| Darnall & Jones..... | 3,084.00 | E. J. Hannan..... | 3,690.00 |

Schedule of proposals for remodeling plumbing in Arthur School.

[Received June 3, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| Hutchinson & McCarthy..... | \$3,043.00 | Jas. Nolan & Sons..... | \$4,145.00 |
| S. S. Shedd & Bro. Co..... | 3,774.00 | Wm. Rothwell & Son..... | 4,346.00 |
| Darnall & Jones..... | 3,887.00 | E. J. Hannan..... | 4,519.00 |

Schedule of proposals for remodeling plumbing in Slater School.

[Received June 3, 1908.]

| Bidder. | Amount. | Bidder. | Amount. |
|----------------------------|------------|-------------------------|------------|
| Hutchinson & McCarthy..... | \$2,893.00 | Wm. Rothwell & Son..... | \$3,065.00 |
| S. S. Shedd & Bro. Co..... | 2,994.00 | Jas. Nolan & Sons..... | 3,395.00 |
| Darnall & Jones..... | 3,034.00 | E. J. Hannan..... | 3,694.00 |

Schedule of proposals for plumbing work in Patterson School.

[Received June 20, 1908.]

| Bidder. | Clow closet. | Mott closet. | Douglas closet. |
|----------------------------|--------------|--------------|-----------------|
| Hutchinson & McCarthy..... | \$2,771.00 | | |
| S. S. Shedd & Bro. Co..... | 2,884.00 | | \$2,824.50 |
| Wm. Rothwell & Son..... | 2,844.00 | \$2,844.00 | 2,793.00 |
| Darnall & Jones..... | 2,734.00 | | |

Schedule of proposals for plumbing work in Orr School.

[Received June 20, 1908.]

| Bidder. | Clow closet. | Mott closet. | Douglas closet. |
|----------------------------|--------------|--------------|-----------------|
| S. S. Shedd & Bro. Co..... | \$3,048.00 | | \$3,013.00 |
| Wm. Rothwell & Son..... | 3,166.00 | \$3,166.00 | 3,136.00 |
| Darnall & Jones..... | | | 2,856.00 |

Schedule of proposals for plumbing work in the Wilson School.

[Received June 20, 1908.]

| Bidder. | Clow closet. | Mott closet. | Douglas closet. |
|----------------------------|--------------|--------------|-----------------|
| Hutchinson & McCarthy..... | \$2,821.00 | ..... | ..... |
| S. S. Shedd & Bro. Co..... | 2,796.50 | ..... | \$2,737.50 |
| W. Rothwell & Son..... | 2,879.00 | \$2,879.00 | 2,828.00 |
| Darnall & Jones..... | 2,696.00 | ..... | ..... |

STATEMENT OF CONTRACTS.

Contracts for furnishing construction material, fiscal year 1908.

| No. | Date. | Name of contractor. | Description. |
|------|------------------|---------------------------------------|---|
| 3950 | 1907. June 27 | Washington Asphalt Block and Tile Co. | Asphalt blocks. |
| 3952 |do.... | The Grove Lime and Coal Co..... | Natural hydraulic cement. |
| 3953 | June 25 | C. P. Mayer Brick Co..... | Repressed vitrified paving blocks. |
| 3956 | June 17 | Frank Peach & Co..... | Granite curbing. |
| 3957 | June 18 | Jenkins Manufacturing Co..... | Lead flange couplings. |
| 3958 | June 17 | Jas. M. Porter..... | Rectangular, repressed vitrified sewer invert bricks. |
| 4031 | July 25 | The Anderson Coupling Co..... | Furnish brass stopcocks. |
| 4057 | Nov. 8 | Potomac Dredging Co..... | Furnish sand and gravel. |
| 4077 | 1908. Feb. 1 | Wise Granite Co..... | Furnish curb. |
| 4080 | Mar. 13 | American Sewer Pipe Co..... | Furnish terra-cotta sewer pipe. |
| 4114 | June 11 | James M. Porter..... | Furnish vitrified paving blocks. |
| 4115 | June 18 | National Mortar Co..... | Furnish Portland cement. |
| 4116 | June 19 | Stuart R. Carr & Co..... | Furnish manhole frames and covers. |
| 4118 | June 20 | Lynchburg Foundry Co..... | Furnish cast-iron water pipe. |
| 4119 | June 19 | Georgia Granite Co..... | Furnish curb. |
| 4121 |do.... | W. P. Evans..... | Do. |
| 4122 |do.... | American Sewer Pipe Co..... | Furnish terra-cotta sewer pipe. |
| 4124 |do.... | N. J. Foundry and Machine Co..... | Miscellaneous castings. |
| 4131 | June 18 | Washington Asphalt Block and Tile Co. | Furnish asphalt paving blocks. |
| 4141 | June 24 | Wise Granite Co..... | Granite curb. |

Contracts for construction of sewers, fiscal year 1908.

| No. | Date. | Name of contractor. | Location. | Character of work. |
|------|------------------|----------------------------|--|--|
| 3970 | 1907. July 26 | Jas. A. Coyle..... | Chevy Chase streets..... | Construct 3,725 feet of 10-inch diameter and 2,135 feet of 12-inch diameter pipe sewers. |
| 3975 | Aug. 6 | The Warren F. Brenizer Co. | South Capitol street between Virginia avenue and G street; South Capitol street between Canal and E, and South Capitol street between E and Virginia avenue. | Construct 570 feet of 2-foot 6-inch sewer, and 105 feet of 2-foot 6-inch sewer, and 305 feet of 24-inch diameter pipe sewer. |
| 4026 | Sept. 4 |do..... | Sixteenth and B streets nw. | Construct storm-water conduit, etc., connecting old B street sewer with Tidal Reservoir. |
| 4051 | Oct. 7 |do..... | Anacostia Bridge approaches | Fill each and all. |
| 4053 | Oct. 21 |do..... | Valley of Soapstone Branch. | Construct 2,000 feet of 18-inch diameter pipe, and 3,900 feet of 15-inch diameter pipe sewer. |
| 4064 | Dec. 10 | Edw. G. Gunnel..... | Arkansas avenue between Delafield and Emerson streets, and in Delafield street between Arkansas and Brightwood avenues. | Construct 500 feet of 9-foot 3-inch and 720 feet of 4-foot 6-inch diameter sewer. |
| 4074 | 1908. Jan. 31 |do..... | Massachusetts avenue nw., Waterside drive to Observatory circle. | Construct 2,625 feet of 15-inch pipe sewer, 150 feet of 12-inch, and 250 feet of 10-inch. |
| 4079 | Feb. 20 | W. F. Brenizer Co..... | Fortieth street between Van Ness and Yuma; Wisconsin avenue between Van Ness street and River road. | Construct 630 feet of 21-inch pipe, 800 feet of 18-inch, 620 feet of 15-inch, and 1,060 feet of 12-inch pipe sewer. |

Contracts for construction of sewers, fiscal year 1908—Continued.

| No. | Date | Name of contractor | Location. | Character of work. |
|------|-----------|------------------------------|--|--|
| | 1908. | | | |
| 4081 | Mar. 19 | E. G. Gummel..... | Valleys of Broad Branch and Soapstone Branch. | Construct 600 feet of 21-inch, 3,000 feet of 18-inch pipe sewer. |
| 4084 | Mar. 30 | W. F. Brenizer Co..... | Ivy City streets..... | Construct 705 feet of 24-inch, 900 feet of 18-inch, 590 feet of 15-inch, and 3,380 feet of 12-inch pipe sewer. |
| 4086 | Apr. 6 | E. G. Gummel..... | Sixth street, between Maine and Missouri avenues. | Construct 800 feet of 4-foot diameter sewer. |
| 4090 | May 12 |do..... | James Creek Valley, north to P street, and P street between James Creek Canal and Four-and-a-half street sw. | Construct 690 feet of 24-inch pipe, 265 feet of 18-inch pipe, and 470 feet of 15-inch pipe sewer. |
| 4091 | ...do.... | Jas. A. Coyle..... | Tunlaw road, between Thirty-ninth street and point west and Thirty-ninth street between Tunlaw road and Fulton street. | Construct 950 feet 15-inch pipe sewer. |
| 4092 | May 16 | W. F. Brenizer Co.... | Right of way near Hickey road. | Construct 2,000 feet of 4-foot 3-inch diameter trunk sewer. |
| 4093 | ...do.... |do..... | Fulton street, between Arizona avenue and Tunlaw road, and Tunlaw road, between Fulton street and west of Thirty-ninth street. | Construct 1,000 feet of 3-foot diameter sewer. |
| 4103 | June 3 | E. G. Gummel..... | Emerson street nw., between Arkansas and Iowa avenues. | Construct 1,140 feet of 12-inch diameter pipe sewer. |
| 4112 | June 12 | W. F. Brenizer Co.... | Arizona avenue at Massachusetts avenue. | Construct 240 feet of 6-foot 3-inch diameter sewer. |
| 4120 | June 22 | Jas. A. Coyle..... | Massachusetts avenue nw., between Observatory circle and Wisconsin avenue. | Construct 2,750 feet of 12-inch pipe sewer. |
| 4123 | June 24 | R. J. Beall Construction Co. | Arizona avenue, between Canal road and a point north of Irving street, between Sherman and Georgia avenues. | Construct 255 feet of 9-foot diameter sewer. |
| 4125 | June 23 | Warren F. Brenizer Co. | Georgia avenue, between Irving and Kenyon streets. | Construct 300 feet of 18-inch, 350 feet of 15-inch, and 330 feet of 12-inch pipe sewer. |
| 4126 | ...do.... |do..... | Connecticut avenue, between Kingle road and Newark street. | Construct 60 feet 4-foot 3-inch diameter, and 650 feet 24-inch pipe sewer. |
| 4127 | June 24 |do..... | Twenty-first and A streets ne. | Grade and pave discharge channel at façade of boundary sewer. |
| 4128 | June 23 |do..... | Beach drive, between Pincy Branch and Petree Mill road. | Construct 3,000 feet of 24-inch pipe sewer. |
| 4129 | ...do.... |do..... | Macomb street, between Arizona avenue and point east of. | Construct 360 feet of 3-foot 3-inch diameter sewer. |
| 4130 | ...do.... |do..... | Blagden avenue, between Beach drive and Decatur street. | Construct 4,000 feet of 18-inch pipe sewer. |
| | | | Blagden avenue, between Decatur and Sixteenth and Sixteenth between Blagden avenue and Hamilton street. | Construct 2,000 feet of 18-inch pipe sewer. |
| 4132 | ...do.... | E. J. Cartright..... | Broad Branch road and southward on Beach drive. | Construct 1,400 feet of 24-inch pipe sewer. |
| 4133 | June 25 | E. G. Gummel..... | Second street ne., between F and G streets. | Construct 300 feet of 3-foot and 250 feet of 2-foot 6-inch sewer. |
| 4137 | ...do.... | R. J. Beall Construction Co. | Twenty-fourth street nw., between M and N. | Construct 330 feet of 15-inch and 300 feet 12-inch diameter pipe sewer. |

Contracts for general supplies, fiscal year 1908.

| No. | Date. | Name of contractor. | To furnish— |
|------|----------|---|----------------------------------|
| | 1907. | | |
| 3951 | June 29 | Fred J. White | Manhole covers. |
| 3953 | July 15 | J. T. Springmann, Jr., & Bro. | Miscellaneous castings. |
| 3960 | July 19 | Judd & Detweiler | Printing blank forms. |
| 3971 | July 25 | J. E. Nume | Schoolbooks. |
| 3973 | Aug. 2 | J. Maury Dove Co. | Fuel. |
| 3977 | Aug. 9 | Sam'l. D. Houck | Saddlery. |
| 3978 | Aug. 7 | Cuyler & Mohler | Hardware and plumbers' supplies. |
| 3979 | July 25 | A. G. Spalding & Bros. | Athletic goods. |
| 3989 | Aug. 7 | Lamb & Tilden | Rubber stamps. |
| 3981 | Aug. 9 | Chas. G. Stott & Co. | Stationery. |
| 3982 | Aug. 12 | Globe Printing Co. | Miscellaneous printing. |
| 3983 | July 25 | Columbia Smelting and Refining Works .. | Plumbers' material. |
| 3985 | Aug. 9 | J. Newton Van Ness Co. | Saddlery. |
| 3986 | Aug. 13 | Louis Hartig | Hardware, etc. |
| 3987 | Aug. 14 | M. G. Copeland Co. | Flags. |
| 3988 | Aug. 12 | John G. Schuerger | Bread. |
| 3989 | Aug. 14 | Michael A. Keane | Meats. |
| 3990 | do. | Z. D. Gilman | Drugs. |
| 3991 | Aug. 15 | American Ice Co. | Ice. |
| 3992 | Aug. 13 | James B. Lambie Co. | Hardware. |
| 3993 | do. | Swift & Co. | Meats. |
| 3994 | Aug. 14 | J. C. Ergood & Co. | Groceries. |
| 3995 | Aug. 16 | W. M. Galt & Co. | Do. |
| 3996 | do. | do. | Forage. |
| 3997 | Aug. 17 | Manhattan Coffee Mills | Groceries. |
| 3999 | Aug. 14 | Fred A. Schmidt | Stationery. |
| 4002 | Aug. 17 | Thos. Somerville Co. | Hardware and plumbers' supplies. |
| 4003 | do. | J. E. Chapman | Fuel. |
| 4004 | Aug. 20 | S. R. Waters | Groceries. |
| 4005 | Aug. 19 | National Electric Supply Co. | Electrical supplies. |
| 4006 | do. | E. J. Murphy Co. | Paints, oils, etc. |
| 4007 | July 8 | Lansburgh & Bro. | Furniture, dry goods. |
| 4008 | Aug. 20 | James F. Oyster | Groceries. |
| 4009 | Aug. 21 | W. T. Galliher & Bro. (Incorporated) .. | Lumber. |
| 4010 | Aug. 20 | W. W. Griffith | Fuel. |
| 4012 | Aug. 23 | W. J. C. Dulany | Stationery, etc. |
| 4013 | Aug. 22 | Blum Bros. | Furniture, dry goods, etc. |
| 4014 | Aug. 14 | T. R. Riley | Lumber. |
| 4016 | Aug. 26 | Rudolph & West Co. | Hardware. |
| 4017 | Aug. 24 | Geo. F. Muth & Co. | Paints and oils. |
| 4018 | Aug. 27 | R. Carter Ballantyne | Stationery, etc. |
| 4019 | do. | R. P. Clarke Co. | Dry goods, etc. |
| 4020 | Aug. 27 | Houghton, Mifflin & Co. | School books. |
| 4021 | Aug. 28 | Harry Kaufman Co. | Boots, shoes, etc. |
| 4022 | do. | Milton Bradley Co. | Kindergarten supplies. |
| 4023 | Aug. 26 | Western Electric Co. | Electrical supplies. |
| 4025 | Aug. 21 | Standard Oil Co. | Oils, etc. |
| 4027 | Sept. 5 | Chas. White & Co. | Miscellaneous castings. |
| 4029 | do. | Empire Steam Laundry | Laundry work. |
| 4030 | Aug. 28 | Thos. W. Smith | Lumber. |
| 4032 | Sept. 5 | A. C. Giles Printing Co. | Miscellaneous printing. |
| 4037 | Sept. 12 | Norman T. Elliott Printing Co. | Do. |
| 4041 | Sept. 14 | Mackall Bros. | Drugs. |
| 4043 | Sept. 17 | Hugh Reilly | Glass, paints, and oils. |
| 4044 | Sept. 18 | Church & Stephenson | Lumber. |
| 4045 | Sept. 19 | Woodward & Lothrop | Furniture and hardware. |
| 4050 | Oct. 10 | Emma P. Hume | Groceries. |
| 4052 | Oct. 12 | W. B. Moses & Sons | Furniture. |
| 4054 | Aug. 16 | Jno. P. Agnew & Co. | Fuel. |
| 4055 | Oct. 30 | Hoover & Denham | Groceries and meats. |
| 4056 | Nov. 7 | J. Edw. Chapman | Fuel. |
| 4058 | Nov. 12 | Dulin & Martin Co. | House furnishings and hardware. |
| 4059 | do. | Geo. E. Howard | Printing and blank forms. |
| 4060 | do. | Berry-Suhling Tobacco Co. | Tobacco. |
| 4071 | Aug. 29 | Ludwig Baumann & Co. | Furniture, etc. |
| | 1908. | | |
| 4094 | May 22 | Library Bureau | Furniture, etc. |
| 4095 | do. | Wallaege Manufacturing Co. | Do. |
| 4099 | May 25 | W. B. Moses & Sons (Incorporated) .. | Do. |
| 4100 | May 22 | W. J. C. Dulany Co. | Do. |
| 4101 | May 25 | The General Fireproofing Co. | Do. |
| 4102 | May 27 | Derby Desk Co. | Do. |
| 4105 | June 4 | Marshall Field & Co. | Do. |
| 4117 | June 20 | Van Dorn Iron Works Co. | Metal cabinet work. |

Construction, hauling, and miscellaneous contracts for fiscal year 1908.

| No. | Date. | Name of contractor. | Description. |
|------|-----------------|---|--|
| 3954 | 1907 July 12 | Jos. H. Gibbons..... | Reinforce floors and walls of Abbott School building, Sixth street and New York avenue nw. |
| 3955 | July 10 | Geo. B. Mullin..... | Unload and haul broken stone. |
| 3959 | July 19 | do..... | Grading, setting curb, etc., where ordered. |
| 3961 | do..... | American-La France Fire Engine Co. | Furnish and deliver one 75-foot aerial hook and ladder truck. |
| 3962 | do..... | The Gutta Percha and Rubber Manufacturing Co. | Furnish and deliver rubber fire hose. |
| 3963 | July 18 | Dunigan Plumbing Co..... | Remodel, complete, the toilet rooms of the Smallwood School building. |
| 3964 | do..... | do..... | Construct, complete, a toilet building at Van Buren School building. |
| 3965 | do..... | do..... | Remodel, complete, the toilet rooms at the Abbott School building. |
| 3966 | do..... | do..... | Remodel, complete, the toilet rooms at the Adams School building. |
| 3967 | July 12 | Jas. J. Overn..... | Grade Sixteenth street extended across the valley of Piney Branch. |
| 3968 | do..... | do..... | Construct, complete, a concrete and stone bridge across Baltimore and Ohio Railroad tracks, on line of Monroe street, extended, Anacostia. |
| 3969 | June 29 | Dunigan Plumbing Co..... | Remodel, complete, the toilet rooms at the Jackson School. |
| 3972 | July 20 | Fabric Fire Hose Co..... | Furnish and deliver cotton fire hose. |
| 3974 | July 23 | The J. L. Mott Iron Works..... | Furnish cast-iron street sign brackets. |
| 3976 | Aug. 6 | Littlefield, Alvord & Co..... | Hauling cast-iron water pipes, etc. |
| 3984 | Aug. 12 | Remington Machine Company..... | Furnish, erect, and install a refrigerating and ice plant at Home for Aged and Infirm at Blue Plains. |
| 4000 | Aug. 1 | Pavarini & Wyne (Incorporated)..... | Construct, complete, 4-room school building at Brightwood Park. |
| 4001 | do..... | do..... | Construct, complete, 4-room school building at southeast corner Whittingham and Lane places, Deanwood. |
| 4011 | Aug. 23 | James B. Latimer and Thos. L. Linney..... | Grade roadway at Brookland avenue, between Bunker Hill road and Bates road. |
| 4015 | Aug. 26 | Pavarini & Wyne (Incorporated)..... | Construct, complete, a municipal crematorium on reservation 13, Washington Asylum grounds. |
| 4024 | Aug. 30 | C. B. Clark & Co..... | Construct, complete, exclusive of lamps, concrete steel bridge cross Baltimore and Ohio Railroad tracks on line of Monroe street, Brookland. |
| 4028 | July 31 | Geo. B. Mullin..... | Grade roadway of Rittenhouse street from Brightwood avenue to Blair road and Rittenhouse street and Western avenue. |
| 4033 | Sept. 6 | Dunigan Plumbing Co..... | Remodel, complete, toilet rooms of the Berret school building. |
| 4034 | Sept. 13 | do..... | Remodel, complete, toilet rooms of the Monroe School building. |
| 4035 | Sept. 12 | The Elmer H. Catlin Co..... | Furnish and install electric-lighting fixtures at Industrial Home School for Colored Children at Blue Plains. |
| 4036 | do..... | Edw. J. Hannan..... | Remodel, complete, plumbing work in two bath rooms in old almshouse building. |
| 4038 | Sept. 7 | Art Metal Construction Co..... | Furnish and install, complete, in new District building, metal cabinet work and stands, etc. |
| 4039 | Sept. 4 | Pavarini & Wyne (Incorporated)..... | Construct frame stable at Colored Industrial Home School. |
| 4040 | Aug. 27 | Gilbert D. Emerson..... | Bind and repair books at the Free Public Library bindery. |
| 4042 | Sept. 17 | E. G. Gummel..... | Grade Albemarle street nw from Connecticut avenue westward. |
| 4046 | Oct. 3 | Colburn Bros..... | Lay cement sidewalks. |
| 4047 | Sept. 27 | Art Metal Construction Co..... | Furnish and erect steel shelving, file cases, in office of clerk of supreme court of the District of Columbia. |
| 4048 | Sept. 26 | William E. Mooney..... | Construct steps in police court building. |
| 4049 | Oct. 8 | Burgess & Parsons..... | Construct 4-room addition to Petworth School building. |
| 4061 | Nov. 26 | Geo. A. Fuller Co..... | Construct addition to McKinley Manual Training School. |
| 4062 | Nov. 30 | Thos. H. Melton..... | Construct cement storehouse at Fourteenth and D streets sw. |
| 4063 | Dec. 6 | Robt. T. Humphrey..... | Construct 8-room school building on lots 1, 21, 22, 23, and 24, square 800. |
| 4065 | do..... | Burgess & Parsons..... | Construct chemical engine house on part of lot 7, square 4252, Twenty-second street ne., between Everts and Franklin streets. |
| 4066 | do..... | Thos. H. Melton..... | Construct stable for Water Department rear pumping station on Bryant street. |

Construction, hauling, and miscellaneous contracts for fiscal year 1908—Continued.

| No. | Date. | Name of contractor. | Description. |
|------|------------------|---|---|
| 4067 | 1907. Dec. 6 | Thos. H. Melton | Construct engine and truck house on lot 63, Lanier Heights, on Lanier place between Ontario and Adams Mill roads. |
| 4068 | Dec. 9 | Joseph H. Gibbons | Construct 6-room addition to school on Queen's Chapel road in Langdon. |
| 4069 | Dec. 10 | James M. Dunn | Construct 4-room addition to Emery School building, Lincoln road and Prospect street ne. |
| 4070 | Dec. 14 | William E. Mooney | Repairs to buildings at bathing beach. |
| 4072 | Dec. 27 | Potomac Electric Power Co. | Arc and incandescent street lighting. |
| 4073 | 1908. Jan. 13 | National Electrical Supply Co. | Steam pump, etc., power house, Blue Plains. |
| 4075 | Feb. 5 | V. Clad & Sons (Incorporated) | Equipment of kitchen scullery and refrigerator at Tuberculosis Hospital. |
| 4076 | ..do.. | Milton C. Davis | Construct addition to Eastern Market house. |
| 4078 | Feb. 14 | Pollock Drayage and Storage Co. | To collect ashes. |
| 4082 | Mar. 13 | American Laundry Machinery Manufacturing Co. | Furnish laundry machinery, etc., for Tuberculosis Hospital. |
| 4083 | Mar. 28 | American Mosaic Co. | Lay tile floor in engine room at sewerage pumping station. |
| 4085 | Apr. 3 | William E. Mooney | Construct 12-room school building No. 155 in square 1038. |
| 4087 | May 4 | Milton C. Davis | Construct 16-room school building No. 153 in square 3069. |
| 4088 | Apr. 6 | Geo. A. Fuller Co. | Construct 16-room school building No. 154 in square 2576. |
| 4089 | May 4 | Jas. M. Dunn | Construct 4-room school building No. 143 addition to Gage School. |
| 4096 | May 19 | Hutchinson & McCarthy | Plumbing work, Garrison School. |
| 4097 | ..do.. | ..do.. | Plumbing work, Fillmore school. |
| 4098 | May 23 | Isaac H. Fisher | Load and haul vitrified block material. |
| 4104 | June 2 | The Enos Co. | Furnish and install electric-lighting fixtures. |
| 4106 | May 29 | Darnall & Jones | Plumbing work, Magruder School. |
| 4107 | ..do.. | ..do.. | Plumbing work, Pierce School. |
| 4108 | June 4 | The Elkins Co. | Concrete lions for Connecticut Avenue Bridge. |
| 4109 | June 11 | The Self Winding Clock Co. | Furnish and install electric clock system, Municipal building. |
| 4110 | June 13 | Brennan Construction Co. | Lay sheet asphalt roadway, approach to T Street Bridge over Baltimore and Ohio tracks. |
| 4111 | ..do.. | ..do.. | Lay granite block pavement on First street ne., between H street and New York avenue. |
| 4113 | June 14 | Hutchinson & McCarthy | Sewer and water main connections 403, 405, 409, 411 Twenty-sixth street nw. |
| 4134 | June 24 | E. G. Gummel | Grade Massachusetts avenue nw., between Wisconsin and Nebraska avenues. |
| 4135 | ..do.. | ..do.. | Fill approaches to Monroe street viaduct over Baltimore and Ohio Railroad. |
| 4136 | June 23 | G. & W. Manufacturing Co. | Furnish and install tubular boiler at Home for Aged at Blue Plains. |
| 4138 | June 29 | Cranford Paving Co. | Lay trap rock blocks on roadways adjacent to sewerage pumping station. |
| 4139 | June 30 | American Safety Tread Co. | Equip stairways, platforms, and landings in Franklin School building. |
| 4140 | ..do.. | Geo. B. Mullin | Unload and haul broken stone and screenings. |
| 4142 | ..do.. | American La France Fire Engine Co. | Furnish and deliver all steel chemical and hose wagons and equipments. |
| 4143 | June 29 | Hutchinson & McCarthy | Remodel plumbing in Polk School. |
| 4144 | ..do.. | ..do.. | Remodel plumbing in Slater School. |
| 4145 | ..do.. | ..do.. | Remodel plumbing in Arthur School. |
| 4146 | ..do.. | ..do.. | Remodel plumbing in Carberry School. |

REPORT OF PERMIT CLERK.

WASHINGTON, August 27, 1908.

SIR: I have the honor to submit the annual report of the operations of the permit clerk's office, giving, by monthly summary, in detail the character and number of permits issued during the fiscal year ended June 30, 1908.

Permits issued for which fees were paid, as shown by the receipts of the collector of taxes, District of Columbia, on applications therefor were:

| | 1907. | | | | | | 1908. | | | | | | Total. |
|--|-------|------|-------|------|------|------|-------|------|------|-------|------|-------|--------|
| | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | |
| Water: | | | | | | | | | | | | | |
| Connections..... | 161 | 155 | 148 | 135 | 125 | 92 | 92 | 70 | 146 | 199 | 186 | 180 | 1,689 |
| Repairs..... | 162 | 139 | 127 | 142 | 78 | 111 | 85 | 96 | 101 | 98 | 93 | 72 | 1,304 |
| Sewer: | | | | | | | | | | | | | |
| Connections..... | 165 | 145 | 173 | 160 | 128 | 89 | 99 | 80 | 133 | 242 | 220 | 163 | 1,797 |
| Repairs..... | 103 | 76 | 59 | 83 | 75 | 67 | 69 | 61 | 87 | 67 | 80 | 85 | 912 |
| Gas: | | | | | | | | | | | | | |
| Connections..... | 229 | 237 | 222 | 167 | 118 | 70 | 101 | 52 | 130 | 222 | 190 | 182 | 1,920 |
| Repairs..... | 8 | 14 | 15 | 11 | 16 | 22 | 11 | 15 | 17 | 12 | 13 | 15 | 169 |
| Carriage blocks..... | | | | | | 1 | | | | | | | 1 |
| Conduits: | | | | | | | | | | | | | |
| Chesapeake and Potomac Telephone Co..... | 11 | 32 | 14 | 22 | 23 | 20 | 27 | 24 | 20 | 30 | 40 | 32 | 295 |
| Potomac Electric Power Co..... | 9 | 6 | 10 | 5 | 6 | 11 | 6 | 7 | 7 | 4 | 8 | 4 | 83 |
| Western Union Telegraph Co..... | | | 5 | | | 2 | 1 | | | 1 | 3 | 14 | 26 |
| Private..... | 2 | | 1 | | | | | | | | | | 4 |
| Gas mains..... | 7 | 3 | 7 | 10 | 21 | 7 | 10 | 5 | 13 | 6 | 9 | 10 | 108 |
| Guard stones..... | | | | | 1 | 2 | 1 | 1 | | | 1 | 1 | 8 |
| Hitching posts or rings..... | | 2 | 2 | 1 | 1 | 1 | | | | 2 | 1 | 1 | 11 |
| Manholes, connect with sewers: | | | | | | | | | | | | | |
| Chesapeake and Potomac Telephone Co..... | 3 | 2 | 1 | 7 | 7 | 6 | 8 | 5 | 4 | 11 | 15 | 15 | 84 |
| Potomac Electric Power Co..... | | 4 | 5 | 8 | 2 | 1 | 9 | 3 | 1 | 1 | 3 | | 37 |
| Railroad Co..... | 1 | | | | | | 1 | | | | | 3 | 5 |
| Manholes, construct and enlarge..... | 2 | 4 | 8 | 25 | 6 | 6 | 5 | 10 | 6 | 9 | 24 | 7 | 112 |
| Parking fences erect..... | 38 | 36 | 36 | 18 | 22 | 14 | 16 | 3 | 48 | 97 | 77 | 36 | 441 |
| Poles..... | 29 | 26 | 15 | 38 | 58 | 45 | 23 | 29 | 45 | 44 | 17 | 17 | 386 |
| Total..... | 930 | 881 | 849 | 832 | 688 | 567 | 564 | 461 | 758 | 1,045 | 990 | 837 | 9,392 |

Permits issued without fees were:

| | 1907. | | | | | | 1908. | | | | | | Total. |
|---|-------|------|-------|------|------|------|-------|------|------|------|------|-------|--------|
| | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | |
| Special: | | | | | | | | | | | | | |
| Water..... | 33 | 27 | 19 | 30 | 29 | 28 | 31 | 24 | 18 | 31 | 51 | 28 | 349 |
| Sewer..... | 53 | 57 | 64 | 87 | 60 | 44 | 53 | 31 | 56 | 67 | 94 | 106 | 772 |
| Gas..... | 3 | 2 | 2 | 2 | 1 | 4 | 2 | 1 | 5 | 8 | 13 | 9 | 52 |
| Alleys, close..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Blasting..... | 1 | 3 | 2 | 1 | 1 | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 24 |
| Bridge across gutter..... | 10 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 19 |
| Cables, aerial..... | 2 | 7 | 2 | 2 | 10 | 6 | 8 | 9 | 10 | 10 | 1 | 8 | 74 |
| Conduits, Potomac Electric Power Co., no fee..... | 10 | 7 | 3 | 6 | 2 | 4 | 1 | 1 | 9 | 3 | 6 | 52 | |
| Connections, overhead..... | 6 | 4 | 7 | 16 | 10 | 14 | 8 | 2 | 2 | 2 | 4 | 15 | 99 |
| Copings..... | 33 | 21 | 82 | 41 | 34 | 16 | 1 | 15 | 63 | 105 | 39 | 85 | 535 |
| Driveway..... | 6 | 6 | 4 | 3 | 8 | 2 | 4 | 5 | 4 | 9 | 13 | 64 | |
| Engines, move..... | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4 | 1 | 2 | 20 | |
| Leads: | | | | | | | | | | | | | |
| Lay..... | 87 | 117 | 180 | 118 | 87 | 26 | 8 | 26 | 83 | 186 | 102 | 151 | 1,171 |
| Repair..... | 25 | 27 | 20 | 30 | 35 | 8 | 3 | 15 | 27 | 17 | 39 | 246 | |
| Parking: | | | | | | | | | | | | | |
| Grade..... | 11 | 23 | 11 | 21 | 17 | 21 | 26 | 23 | 12 | 18 | 6 | 15 | 204 |
| Occupy..... | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| Pave..... | 5 | 13 | 4 | 15 | 12 | 3 | 1 | 1 | 1 | 4 | 3 | 27 | 88 |
| Parking railings, re-new..... | 34 | 23 | 27 | 24 | 14 | 10 | 13 | 12 | 42 | 85 | 52 | 58 | 394 |
| Renewals..... | 66 | 48 | 43 | 57 | 24 | 58 | 32 | 31 | 33 | 29 | 31 | 68 | 520 |
| Roadways: | | | | | | | | | | | | | |
| Close..... | 1 | 3 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 14 |
| Grade..... | 4 | 3 | 2 | 2 | 1 | 1 | 3 | 3 | 10 | 1 | 1 | 1 | 30 |
| Occupy..... | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 8 |
| Repair..... | 2 | 1 | 2 | 1 | 1 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 13 |
| Sidewalk: | | | | | | | | | | | | | |
| Grade..... | 4 | 1 | 2 | 2 | 1 | 23 | 2 | 2 | 2 | 1 | 1 | 1 | 33 |
| Haul across..... | 4 | 5 | 3 | 2 | 5 | 3 | 7 | 3 | 6 | 7 | 7 | 7 | 55 |
| Lay..... | 9 | 23 | 20 | 56 | 26 | 6 | 20 | 1 | 3 | 8 | 2 | 18 | 192 |
| Occupy..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| Repair..... | 1 | 5 | 5 | 5 | 6 | 2 | 1 | 3 | 6 | 6 | 7 | 42 | |
| Steps on parking..... | 40 | 76 | 100 | 75 | 57 | 13 | 5 | 18 | 64 | 143 | 40 | 88 | 719 |
| Stopcock boxes..... | 8 | 1 | 1 | 8 | 1 | 8 | 8 | 1 | 1 | 1 | 1 | 1 | 32 |
| Tar kettles..... | 1 | 1 | 1 | 1 | 2 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 11 |
| Trees: | | | | | | | | | | | | | |
| Remove..... | 12 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 |
| Whitewash or paint boxes..... | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| United States Government..... | 4 | 1 | 2 | 3 | 2 | 2 | 4 | 1 | 12 | 1 | 1 | 2 | 16 |
| Walls, retaining..... | 6 | 3 | 8 | 4 | 7 | 2 | 4 | 1 | 12 | 1 | 11 | 11 | 71 |
| Water tables..... | 12 | 7 | 12 | 7 | 7 | 6 | 1 | 3 | 9 | 18 | 9 | 14 | 105 |
| Wires, string..... | 61 | 10 | 4 | 70 | 13 | 9 | 56 | 1 | 10 | 58 | 5 | 13 | 310 |
| Anacostia and Potomac River R. R. Co. Baltimore and Ohio R. Co. Capital Traction R. Co. Philadelphia, Baltimore and Washington R. R. Co. Washington Railway and Electric Co. Miscellaneous..... | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| | 16 | 7 | 4 | 8 | 8 | 5 | 6 | 2 | 4 | 7 | 5 | 6 | 10 |
| | 16 | 7 | 4 | 8 | 8 | 5 | 6 | 2 | 4 | 7 | 5 | 6 | 78 |
| Total..... | 580 | 536 | 632 | 709 | 488 | 306 | 336 | 221 | 480 | 863 | 525 | 806 | 6,482 |

There has been an increase of 796 in the number of permits issued without fee; a decrease of \$742 in the amount of money paid to the collector of taxes, District of Columbia, for permit fees, as shown on applications bearing his authorized official signature on file in this office; a net increase in the number of permits issued for the fiscal year.

Permits issued during the fiscal years:

| | |
|-------------|---------|
| 1906-7..... | 15, 820 |
| 1907-8..... | 15, 874 |

The following table shows the number of permits issued during the past ten years and the amount of money paid for permit fees to the collector of taxes, District of Columbia, during that time:

| Fiscal year. | Permits issued. | Fees paid. | Fiscal year. | Permits issued. | Fees paid. |
|----------------|-----------------|------------|--------------|-----------------|------------|
| 1898-9..... | 11,380 | \$7,692 | 1903-4..... | 12,565 | \$8,103 |
| 1899-1900..... | 10,589 | 6,797 | 1904-5..... | 13,908 | 9,518 |
| 1900-1901..... | 10,552 | 6,583 | 1905-6..... | 16,019 | 10,496 |
| 1901-2..... | 11,496 | 7,388 | 1906-7..... | 15,820 | 10,134 |
| 1902-3..... | 12,559 | 7,930 | 1907-8..... | 15,874 | 9,392 |

One thousand three hundred and thirty-five communications have been referred to this office, briefs made on cards, permits when necessary written or reports made, the papers indorsed with action taken, the papers then returned to the record office of the engineer department or through that office to the division having charge of the inspection of the work for which the permits were issued.

A daily report of all permits for excavations made in the public space has been forwarded to the engineer of highways.

I take pleasure in acknowledging the efficient services of the assistant permit clerk and the index clerk, who have worked earnestly, most frequently under adverse conditions, continuous attention to any one thing for any length of time being impracticable on account of the variety of permits issued, to keep work up to date at all times. The several orders of the commissioners in regard to the issuing permits to operate and registration of motor vehicles and the act of Congress requiring a fee for such "identification tag and registration thereof" by the owner of each motor vehicle has increased the work of this office at least 33 per cent, and I wish to extend my thanks for the cordial manner in which I have been assisted in all the duties assigned me.

Very respectfully,

Maj. JAY J. MORROW,

Corps of Engineers, U. S. Army,

Engineer Commissioner, District of Columbia.

H. M. WOODWARD,

Permit Clerk, District of Columbia.

REPORT OF WHARF COMMITTEE.

SEPTEMBER 24, 1908.

SIR: The wharf committee has the honor to submit the following report of its operations during the fiscal year ended June 30, 1908. Accompanying the report is a list of the wharf property under lease, from which it will be seen that the amount received from rentals during the year was \$16,513.

This wharf property is located on the Washington and Georgetown channels of the Potomac River, on the Eastern Branch or Anacostia River, on the James Creek Canal, and on Rock Creek. The most important wharf property is located along the Washington channel between Seventh and Fourteenth streets SW. It is here that all the excursion and passenger traffic is located and the most important commercial wharves. These wharves are practically all under lease for periods of five years from March 15, 1908. The leases were originally made March 15, 1903, for a period of five years with the privilege in most cases of an extension at the same rate of rental for a further period of five years. At the expiration of the original term of five years—that is, March 15, 1908—your committee made an appraisal of the value of this wharf property, which developed that the rentals being received did not represent an adequate return on the value of the property. As, however, the lessees were entitled to the privilege of renewing at the amount of rental reserved in their original leases, such renewals were granted at the old rates, but in three instances where there were no privileges of renewal the amount of rental was increased to that estimated to be the proper rental by your committee.

WHARVES ALONG THE JAMES CREEK CANAL.

James Creek Canal formerly extended from G street to the Eastern Branch, but on account of the construction of a sewer across the bed of the canal at L street it is not navigable above that point and it is now being filled to about M street. The plans

for the sewerage disposal system provide for the construction of a dike across the canal at N street, and for this reason no land is now under lease above N street. Practically all of the available frontage from N street southward is under lease at a rental of \$0.75 per front foot abutting on the canal. This frontage is used for the storage of sand, wood, and building material, which is brought to this point by barges. On account of the present lack of wharf facilities it is believed advisable that such use of this canal be continued for some years. Formerly this canal was an open sewer, but the plans for the sewerage disposal system provided for taking care of the sewerage which formerly entered the canal and it is not now used for that purpose.

WHARVES ALONG THE ANACOSTIA RIVER.

This frontage is largely undeveloped, due to the uncertainty regarding the ownership of the abutting land and riparian rights. Several leases have, however, been made of frontages where no question of ownership was involved, and the District of Columbia itself is about to construct a wharf here for the storage of sand, gravel, and other construction material, this wharf being made necessary by the abandonment of a similar storage yard on the James Creek Canal. An appropriation of \$4,000 was made for the purpose in the last District appropriation bill.

WHARVES ALONG THE POTOMAC CHANNEL AND ROCK CREEK.

Most of the frontage along the Potomac channel and Rock Creek is in the hands of private parties; but where public streets intersect this portion of the river and the creek, land has been leased to private parties by the District of Columbia.

REPORT ON IMPROVEMENT OF THE HARBOR FRONT.

The wharf committee on December 27, 1907, submitted a report on the improvement of the entire harbor front of the District of Columbia, and this report was submitted to Congress by the commissioners May 23, 1908, and printed as Senate Document No. 519, Sixtieth Congress, first session. Owing to the fact that Congress adjourned shortly after the report was submitted, no action was taken upon it by that body, but your committee would urge that the appropriations mentioned in the report be submitted to Congress in the next estimates of the commissioners. This report went into the improvement of the harbor front in a very extensive manner and was accompanied by illustrations showing present conditions and proposed improvements. Recommendations were made as follows:

1. An appropriation of \$25,000 for the purchase of a strip of the Potomac water front, from Shepherds Landing to Giesboro Point.
2. An appropriation of \$75,000 for the purchase of a strip of land along the Anacostia River from Giesboro Point to Massachusetts avenue.
3. An appropriation of \$5,000 for plans and surveys for reclamation of the Anacostia River from Massachusetts avenue to the District line.
4. An appropriation of \$462,500 toward the improvement of the Washington channel, the total estimated cost of the work being \$2,775,000.

Your committee believes that if the facts stated in this report are brought to the attention of Congress the necessity for these appropriations will be amply demonstrated. The present condition of the wharf property under the jurisdiction of the commissioners is very bad. The buildings and the wharf structures are generally in a very poor condition, and much valuable wharf space is wasted by the poor arrangement. The present arrangement is unsystematic, and if the plans of your committee are carried out, not only will an improvement be made in this direction, but also much valuable wharf frontage, which is not now available on account of the bad arrangement, will be available for renting.

Very respectfully,

J. R. SUTTON,
W. J. DOUGLAS,
D. E. GARGES,
Wharf Committee.

Maj. JAY J. MORROW,
Corps of Engineers, U. S. Army,
Engineer Commissioner, District of Columbia.

List of wharf property under lease.

POTOMAC RIVER FRONT.

| Name of lessee. | Location. | Expires. | Water frontage. | Area. | Rental per year. |
|--|--|---------------|--------------------|-------------------------|------------------|
| William Neitzey..... | Section 3, structure 23..... | Mar. 15, 1909 | <i>Feet.</i> 18 | <i>Sq. ft.</i> 1,440 | \$60 |
| Potomac Gunning and Fishing Club. | Section 2, structures 42 and 43..... | do..... | 18 | 1,000 | 60 |
| Louis E. Rauterberg..... | Section 2, structure 20..... | do..... | 40 | ..... | 60 |
| William A. Ragan..... | Section 3, structure 22..... | do..... | 45 | 2,600 | 100 |
| Nicholson, Freeman and Martin. | Section 2, structures 36, 37, and 38..... | Mar. 15, 1910 | 44 | 3,320 | 100 |
| Edward J. Gardner..... | Section 3, structure 21..... | Oct. 1, 1908 | 20 | 1,600 | 75 |
| Edward M. Willis..... | Section 3, at foot of Thirteen-and-a-half street, opposite square southeast of 267. | Mar. 15, 1912 | 330 | 35,000 | 400 |
| Norfolk and Washington Steamboat Co. | Section 1, structures 41 to 49, inclusive, and 57 and 60. | Mar. 15, 1913 | 220 | 20,300 | 1,200 |
| Do..... | Section 1, structures 60 and 65 to 72, inclusive. | Jan. 1, 1912 | 190 | 35,600 | 1,500 |
| Independent Steamboat and Barge Co. | Section 1, structures 26 to 30, inclusive. | Oct. 1, 1912 | 120 | 7,000 | 300 |
| Stephenson Bros..... | Section 2, structures 1 to 10, inclusive. | Feb. 1, 1912 | 300 | 59,900 | 900 |
| Johnson and Wimsatt..... | Section 3, structures 5 to 11, inclusive. | Mar. 15, 1913 | 190 | 43,500 | 900 |
| Gustave W. Forsberg..... | Section 2, structures 22 to 33, except 24, and 118, 119, and 120. | do..... | 156 | 18,000 | 733 |
| John Miller..... | Section 3, structures 24 to 27, inclusive. | do..... | 200 | 26,600 | a 300 |
| Wm. A. Wimsatt and Wm. A. H. Church. | Section 2, structures 34 and 35..... | do..... | 80 | 18,000 | 720 |
| J. Harrison Johnson..... | Section 3, structures 12 to 20, inclusive. | do..... | 168 | 38,000 | 750 |
| William W. Riley..... | Section 2, structures 98 to 114, inclusive; 116, 117, 121 to 129, inclusive; section 3, structures 1, 2, 3, 4. | Mar. 15, 1908 | 496 | 117,800 | a 1,200 |
| American Ice Co..... | Section 2, structures 54 to 58, inclusive (renewal pending); 60 to 67, inclusive; 78 to 88, inclusive. | Mar. 15, 1913 | 496 | 102,100 | 2,500 |
| Conrad F. Bennett..... | Section 2, structures 89 to 97, inclusive. | do..... | 54 | 7,500 | 200 |
| William A. Wimsatt..... | Section 2, structures 43 to 49, inclusive; 50 to 53, inclusive; 59 to 61, inclusive. | Mar. 15, 1909 | 147 | 24,500 | 100 |
| Edward A. Cumberland..... | Section 2, structures 39 and 40. | do..... | 40 | 2,400 | 70 |
| George A. Tasker..... | Section 2, structure 41 and south of 41. | do..... | 18 | 1,148 | 60 |
| Mount Vernon and Marshall Hall Steamboat Co. | Section 1, structures 59, 62, 63, 64. | Mar. 15, 1913 | 125 | 10,000 | 600 |
| Washington and Potomac Steamboat Co. | Section 1, structures 31 to 37, inclusive; section 2, structures 11 to 19 and 21. | do..... | 330 | 43,600 | 1,050 |
| Carter & Clark..... | Section 2, structures 68 to 77, inclusive. | May 1, 1913 | 280 | 45,800 | b 750 |
| J. Maury Dove Co. | Foot of G street..... | Sept. 1, 1909 | 100 | ..... | 120 |
| Brennan Construction Co. | Foot of Thirty-first street..... | Feb. 1, 1913 | 33 | ..... | 240 |
| Capital Yacht Club..... | Section 2, foot of Ninth street sw., between structures 39 and 41. | July 1, 1909 | ..... | ..... | 75 |
| Total..... | ..... | ..... | ..... | ..... | 15,123 |

ANACOSTIA RIVER FRONT.

| | | | | | |
|---------------------------|---|----------------|-------|-------|-------|
| Warren F. Brenizer..... | Opposite lot 1, square south of square 744. | Nov. 4, 1914 | 132.2 | ..... | \$132 |
| Thos. W. Smith..... | Opposite square south square 744. | Nov. 5, 1914 | 132.2 | ..... | 132 |
| Thomas Tole..... | West side of Anacostia Bridge. | July 1, 1909 | 40 | ..... | 40 |
| Alfred Richards Brick Co. | Foot Q street se..... | Sept. 29, 1908 | 127 | ..... | 120 |
| Harry D. Bailey..... | North side, east of Anacostia Bridge. | Oct. 19, 1907 | 30 | ..... | 30 |
| C. L. Gummel..... | All water frontage on Anacostia River between building lines of Fourth street se. | June 30, 1909 | ..... | ..... | 50 |
| Total..... | ..... | ..... | ..... | ..... | 504 |

a Also \$300 in improvements.

b Also \$750 in improvements.

List of wharf property under lease—Continued.

JAMES CREEK CANAL.

| Name of lessee. | Location. | Expires. | Water frontage. | Area. | Rental per year. |
|--|---------------------------|---------------|-----------------|----------------|------------------|
| | | | <i>Feet.</i> | <i>Sq. ft.</i> | |
| Applestein, Isaac..... | Parcel No. 6..... | July 1, 1909 | 75 | 3,750 | \$93.75 |
| Carter & Clark..... | Parcel No. 11..... |do..... | 103 | 8,000 | 77.25 |
| Do..... | Parcel No. 5..... |do..... | 97 | 8,000 | 72.75 |
| Robert Murphy..... | Parcels Nos. 1 and 3..... |do..... | 445 | 35,600 | 173.50 |
| O. P. Andrews..... | Parcel No. 27..... | Mar. 21, 1909 | 15 | ..... | 7.50 |
| Washington Brick and Terra Cotta Co..... | Parcel No. 2..... | June 30, 1909 | 455 | ..... | 341.25 |
| Lewis Jefferson..... | Parcel No. 9..... |do..... | 100 | ..... | 75.00 |
| Total..... | ..... | ..... | ..... | ..... | 841.00 |

ROCK CREEK.

| | | | | | |
|-------------------------|--------------------------------------|--------------|-------|-------|--------|
| Potomac Granite Co..... | Foot L street, east side Rock Creek. | Monthly..... | | | \$3.75 |
|-------------------------|--------------------------------------|--------------|-------|-------|--------|

REPORT OF THE BOARD FOR THE CONDEMNATION OF INSANITARY BUILDINGS.

AUGUST 7, 1908.

SIR: We have the honor to submit herewith the following report of the transactions of the board for the condemnation of insanitary buildings for the year ending June 30, 1908.

TABLE NO. 1.—*Number of houses inspected and action taken with respect thereto during the year ending June 30, 1908.^a*

| | Examined. | Demolished. | Repaired. |
|--------------|-----------|-------------|-----------|
| Alleys..... | 156 | 124 | 64 |
| Streets..... | 354 | 217 | 66 |
| Total..... | 510 | 341 | 130 |

^a The apparent discrepancy between the number of houses demolished and repaired and those examined is caused by repairs and removals being made to houses that were examined during the year ending 1907, and is fully explained in Tables 2 and 3 following.

TABLE NO. 2.—*Number of houses inspected and action with respect thereto during the year ending June 30, 1907.*

| | Examined. | Demolished. | Repaired. |
|--------------|-----------|-------------|-----------|
| Alleys..... | 175 | 89 | 33 |
| Streets..... | 274 | 115 | 61 |
| Total..... | 449 | 204 | 94 |

TABLE NO. 3.—*Total number of houses acted upon since the creation of the board for the condemnation of insanitary buildings.*

| | Examined. | Demolished. | Repaired. | Pending. |
|--------------|-----------|-------------|-----------|----------|
| Alleys..... | 331 | 213 | 97 | 21 |
| Streets..... | 628 | 332 | 127 | 169 |
| Total..... | 959 | 545 | 224 | 190 |

On account of the termination of notices extending over the fiscal years, it is necessary to carry the two years in order to properly account for action taken.

Cases referred to other departments for correction, such as dirty yards, leaky hydrants, defective closets, full-box privies, dangerous sheds and dwellings, defective gutters and down spouts, and other minor complaints, 203.

Total number of meetings of the board for the condemnation of insanitary buildings for the year ending June 30, 1908, 26.

Number of notices served and signs affixed to buildings during the year ending June 30, 1908:

| | |
|--|-----|
| Preliminary notices served..... | 372 |
| Condemnation notices served..... | 345 |
| Condemnation signs affixed to buildings..... | 323 |

Total..... 1,040

Number of tenants required to secure other quarters by reason of buildings being demolished through action on the part of the board for the condemnation of insanitary buildings for the year ending June 30, 1908:

| | Adults. | Children. | Total. |
|--------------|---------|-----------|--------|
| Streets..... | 403 | 272 | 675 |
| Alleys..... | 226 | 155 | 381 |
| Total..... | 629 | 427 | 1,056 |

Total number of tenants required to secure other quarters since the creation of the board for the condemnation of insanitary buildings up to the year ending June 30, 1908:

| | |
|---------------|-----|
| Adults..... | 984 |
| Children..... | 630 |

Total..... 1,614

Number of tenants benefited by repairs to dwellings through action on the part of the board for the year ending June 30, 1908:

| | Adults. | Children. | Total. |
|--------------|---------|-----------|--------|
| Streets..... | 203 | 87 | 290 |
| Alleys..... | 107 | 112 | 319 |
| Total..... | 410 | 199 | 609 |

Assessed valuation of improvements removed in alleys during fiscal year 1908..... \$18,900.00

Assessed valuation of improvements removed in streets during fiscal year 1908..... 21,900.00

Total valuation..... 40,800.00

Rental value per annum of houses removed in alleys for the fiscal year 1908..... 4,455.00

Rental value per annum of houses removed in streets for the fiscal year 1908..... 12,047.40

Total rents per annum..... 16,502.40

On account of refusal or neglect of owners it has been necessary for the board to remove 8 buildings during the year, 3 of which were in streets and 5 in alleys. No vouchers have been drawn against the appropriation for expenses incident to the removal of any structures, as the old materials contained therein were more than sufficient to meet the cost of removal. In connection with the enforced removal of buildings the board has collected and deposited with the collector of taxes the sum of \$43, which amount is payable upon the proper application of the owners for the same.

Six cases have been referred to the corporation counsel for appropriate action in the police court. Personal bonds were taken in three cases where tenants refused to vacate, which resulted in the houses being vacated without further action. In one case the owner was fined \$10 for failure to demolish, and in another case personal bonds were taken, conditioned upon the removal of the house; this was not done within the time allowed and the case was reopened and the party sent to the workhouse for five days for contempt of court and returned and fined \$5. One case is now pending for jury trial for failure to demolish or properly repair.

Two owners, representing 9 houses, appealed from the decisions of the board and presented the cases to the supreme court of the District of Columbia, praying that the orders of the board be modified or set aside. It was shown in the trial of the case involving the 8 houses that the appeal had been made after the period of condemnation, that under the wording of the statute the owner had slept upon her rights, and the houses were demolished without cost to the board. The other case, involving 1 house, was abandoned by the owner and the house voluntarily removed without cost or assessment of damages. At the close of the fiscal year 1908 no cases are pending before the court in connection with condemnation proceedings by the board.

Special attention is still being given to structures unprovided with sewer and water connections, with a view of removal or, if the premises are in a condition to justify, to the making of such connections in order to assist the health department in eliminating box privies wherever possible.

Two cases have been brought to the attention of the board during the year, where sewer connections had been made under the assessment system of the compulsory-drainage act, on account of the nonresidence of owners and their failure to comply with District of Columbia orders in regard to the same. The law provides for the installation of sewer and proper water connection for closet, but makes no provision for yard hydrant or other method of obtaining water for domestic use, and hence no hydrant or kitchen sink had been installed. In consequence, the tenants were forced to seek a public pump or connect a short piece of hose with the yard closet in order to obtain water, and had adopted the latter method. Cases of this character are given immediate attention in order to correct the defective condition.

One thousand and forty-two of the total number of tenants affected by the demolition of buildings during the year 1908 were colored, 13 were white, and I was a Chinaman. A small portion of these tenants is going to the suburbs and renting or purchasing cheap homes, but the large majority are remaining within the city. A great many are renting the ordinary two-story brick, and renting rooms, or two families rent one house between them, one taking the upstairs and the other the downstairs, converting the same practically into a two-family flat, but with none of the accommodations usually found in a building of that character. There is, at the present time, an unquestionable demand for the cheaper class of houses to take the place of those being destroyed.

As usual, it has been necessary to grant extensions of time in certain cases for the vacation of the buildings to be demolished, both on account of the poverty of the tenants and in some instances an inability to locate houses coming within their means.

Credit is due both to real estate agents and owners for the general compliance with the orders of the board, and also for assistance rendered in cases of unrecorded transfers, failure to locate owners through the directory, and other reasons which rendered the service of notice peculiarly difficult.

In going over the building permits for the past year it is found that a great many permits have been applied for and issued for a correction of the conditions usually acted upon by the board, and it appears that the owners are taking the initiative in a great many cases and making repairs before action is taken by the board.

A great many frame structures have been demolished that could possibly have been repaired, but the owners felt that the expenditure would not be justified.

Numerous unfounded complaints have been investigated based both upon neighborhood quarrels and a desire of the tenant for revenge when notices are served to vacate for the nonpayment of rent, all of which consumes time that could be used to better advantage.

Bad housekeeping and general neglect is responsible for a great many houses being brought to the attention of the board, where by proper attention to the ordinary household duties there would be no occasion for complaint. The throwing of ashes and rubbish in the back yard instead of placing in cans for authorized collectors results in the yard being elevated above the door in such a manner that ventilation under the floor is prevented and it is possible for water to flow in during rain and snow storms, causing the floors to be damp. The habits of different tenants can be better noted in rows of houses, where they are occupied under the same general conditions and the

character of the houses is practically the same. One will be found in a clean and sanitary condition; others will be found filled with a general accumulation of trash, with no attempt whatever made to keep even within a semblance of cleanliness.

In the annual report for 1907 the board called attention to the fact that some provision should be made for a school wherein good housekeeping could be taught, in order to teach the ignorant how to properly take care of themselves and their homes, which is an absolute benefit both to the occupants and the adjoining residents. Conditions have not materially changed since the above suggestion was made and the board, therefore, reiterates the statement.

Some provision should be made for transportation for the inspector in the service of the board. At the present time the street cars are used. This is a very unsatisfactory method on account of the time wasted in walking to and from connections, and also in the long waits frequently necessary when in the suburbs. It is necessary to make several inspections of each case pending in order to note repairs being made or to see whether or not the building or buildings have been demolished as set forth in the orders of the board. The question of transportation was presented to the Comptroller of the Treasury for a decision, and it was his opinion that none of the money appropriated was available for such purpose under the present wording of the act. The board would, therefore, respectfully recommend that the wording of the appropriation be changed to meet this condition and that a reasonable amount be allowed to provide proper transportation, in order to facilitate the operations of the work under the act.

WM. KELLY,

*Captain, Corps of Engineers, U. S. A.,
Assistant to Engineer Commissioner, District of Columbia,*

WM. C. WOODWARD,

Health Officer, District of Columbia.

THOS. FRANCIS,

Acting Building Inspector.

Board for the Condemnation of Insanitary Buildings.

Maj. JAY J. MORROW,

Corps of Engineers, U. S. Army,

Engineer Commissioner, District of Columbia.

REPORT OF ASSISTANT ENGINEER IN CHARGE OF ROCK CREEK PARK.

WASHINGTON, September 30, 1908.

SIR: I have the honor to submit the following report of operations in Rock Creek Park during the fiscal year ended June 30, 1908:

The most important piece of work done was the completion of a 3-hinge concrete arch viaduct, commenced in the previous year, across a ravine on the Ross drive, to take the place of an old timber trestle. This bridge was built by hired labor under the direction of the engineer of bridges. The greater part of the cost was paid from the park appropriation. The approaches were graded and the roadway of the bridge was covered by the park force.

A chain-gang force was employed throughout the year in preparing ground for and in the care of a public golf course. A 9-hole course was finished and a good growth of grass secured. The teams and dumpmen were paid from the park appropriation.

During the year a small part of the park on the Daniels road was turned over to the water department for use as a pasture for disabled horses. This was placed under fence and the buildings enlarged and improved at the expense of that department. It is still subject to the park regulations.

The balance of the appropriation beyond the expenditure for the bridge and golf course was expended mainly for care and maintenance of roads, bridle paths, and open spaces in the park. During the spring of 1908 the appropriation was so nearly expended that for several months no work at all could be done except a small amount of sprinkling on the roads. No new work could be undertaken for want of funds.

The sum of \$20,000 can be profitably expended during the fiscal year ending June 30, 1910.

The expenditure for the year was divided as follows:

| | | |
|---|--------------|--------------|
| Completing Ross road bridge: | | |
| Materials..... | \$2, 105. 31 | |
| Labor..... | 1, 000. 29 | |
| | | \$3, 105. 60 |
| Work on public golf course: | | |
| Seed, tools, etc..... | 387. 73 | |
| Labor and teams..... | 562. 53 | |
| | | 950. 26 |
| Labor and teams employed in care and maintenance of park: | | |
| Appropriation for 1908..... | 9, 185. 00 | |
| Appropriation for 1908-9..... | a 204. 39 | |
| | | 9, 389. 39 |
| Blacksmithing..... | | 66. 35 |
| Materials of construction, paint, etc..... | | 99. 08 |
| Tools..... | | 59. 85 |
| Feed for fowls..... | | 52. 80 |
| Sprinkling wagon..... | | 291. 20 |
| Mowing machine..... | | 37. 55 |
| Printing reports and stationery..... | | 100. 01 |
| Hauling crushed stone..... | | 588. 47 |
| Crushed stone and freight..... | | 124. 41 |
| Disbursing agent's commission..... | | 57. 13 |
| Miscellaneous..... | | 278. 23 |
| Balance unexpended, 1908..... | | 4. 06 |
| | | 15, 204. 39 |

Very respectfully,

L. R. GRABILL,
Assistant Engineer.

Maj. JAY J. MORROW,
Corps of Engineers, U. S. A., Engineer Commissioner, D. C.,
Secretary Board of Control, Rock Creek Park.

^a Of the appropriation of \$2,000 made immediately available in June, 1908, \$204.39 was expended during the year.

APPENDIX.

SPECIFICATIONS FOR PAVING STREETS AND AVENUES WITH SHEET ASPHALT.

1. *Work.*—The work to be done under this contract will consist of paving with sheet asphalt such streets, avenues, and roads, or parts thereof, or doing any portion of such work, as may be directed under appropriations for the fiscal year ending June 30, 1909. The estimated amount is 43,000 square yards of asphalt surface and 3,100 square yards of vitrified block gutter. These amounts are approximations only and may be considerably varied from; but they will be used in canvassing bids and the award will be based thereon, on the basis of the prices bid for base of type A. The commissioners especially reserve the right to regulate the time and order of executing work ordered under this contract as may appear most advantageous to the interests of the District.

Should a favorable bid for bitulithic roadway pavement be received about 3,700 square yards of asphalt and 600 square yards of vitrified block may be withdrawn from the above estimate of work and paved with bitulithic.

About 10,000 square yards of asphalt and 1,500 square yards of vitrified block under appropriation for elimination of grade crossings will probably be executed during the year in addition to the above. Information as to the particular streets now in contemplation can be secured by inquiry, if desired.

2. *Bids.*—The contractor will, for the prices bid, do all the work prescribed in these specifications, do all the necessary grading and trimming of the roadbed and all rolling; provide bridges, fences, and other means of maintaining travel on intersecting streets, roads, and railroads, and all private driveways after giving due notice to the parties affected thereby; maintain the same in good and safe condition as long as may be necessary, and then remove such temporary expedients and restore such roads to their proper condition; provide watchmen, red lights, fences, and other precautionary measures necessary to the protection of persons and property; furnish all materials (except as specified) and all tools and implements, labor and transportation required to lay and put in complete order for use the specified pavement, and do each and all of these to the satisfaction of the engineer. Upon the completion of the work, he will remove any temporary structures erected during the progress of the work, and restore all fixtures, pavements, and parkings, both public and private, to satisfactory condition.

3. *Grading and subgrade.*—The area over which the pavement is to be laid must be excavated to the proper depth below the surface of the pavement when completed, any objectionable or unsuitable matter below the bed being removed to such depth as may be directed by the engineer and the space filled with good gravel or other acceptable material, compactly rolled and rammed. The bed, after being trimmed so as to be parallel to the surface of the pavement when completed, will be thoroughly compacted by rolling, with a roller weighing not less than 5 tons and by heavy ramming at places which can not be reached by the roller, dampening the bed before rolling and ramming, if required, to the satisfaction of the engineer. No extra allowance will be made for trimming or rolling, but the volume of earth, etc., removed will be paid for as grading of its class.

4. *Concrete base.*—Upon the bed thus prepared there will be laid a 6-inch foundation of concrete as directed, made of the following materials by volume:

For concrete base of type A, 1 part Portland cement, 4 parts sand, 5 parts broken stone, and 5 parts gravel.

For concrete base of type B, 1 part Portland cement, 3 parts sand, and 7 parts gravel.

The proportions of broken stone and gravel may be varied from the above, the aggregate of the two being unchanged, on any street at the option of the contractor and with the permission of the engineer.

The type of base to be used in each case will be decided by the engineer.

5. *Cement.*—The cement used shall conform to the current specifications for supplying cement of its kind to the engineer department of the District of Columbia. No cement shall be used upon the work until it has been tested in the office of the engineer commissioner and accepted by him, the tests to extend over such length of

time, not exceeding twenty-eight days, as the engineer commissioner may think necessary. The cement while in storage or upon the work, or while being hauled upon the work, shall be properly protected, and no cement shall be used which, in the opinion of the engineer commissioner, has been injured by age or exposure. The cement shall be kept by the contractor in store, under proper cover, in the city of Washington, subject to inspection for at least ten days after notifying the inspector of asphalt and cements, before it can be used on the streets, and if deemed advisable by the engineer commissioner, twenty-eight days. Should the contractor's work be delayed by his failure to keep himself supplied with the necessary amount of approved cement, the District shall have the right to furnish him with tested cement from the stocks on hand at the warehouse and charge said contractor with the cost of same at the rate of \$2.50 per barrel of Portland cement for each and every barrel so furnished, and collect the amount due therefor from any moneys found to be due to said contractor by the District.

6. *Sand*.—The sand used shall be clean, sharp river, or pit, sand, containing both fine and coarse grains, but free from sewage, mud, clay, mica, paper, leaves, and other foreign matter and not showing when shaken with water and after subsidence more than 5 per cent, by volume, of silt.

7. *Broken stone*.—Stone used in concrete must be hard, durable, and properly broken to a size small enough to pass through a ring 2 inches in diameter, but none smaller than one-half inch, except when the run of the crusher is substituted for gravel. The run of the crusher shall not contain over 1 per cent of material passing a No. 10 sieve. The stone shall be thoroughly cleansed from all foreign substance, and shall be screened and washed, if so ordered by the engineer. Sand, detritus, or any material other than hard, angular fragments of stone will be considered foreign substances.

8. *Gravel*.—Gravel shall be clean, washed gravel, and shall not contain pebbles greater than $1\frac{1}{2}$ inches in their largest dimensions.

9. *Water*.—Water used for mortar and concrete shall be fresh and clean, free from earth, dirt, or sewage, and shall be used in such quantity as the engineer may direct.

10. *Platforms*.—Platforms shall be provided upon which all sand, gravel, and broken stone for concrete shall be placed when brought upon the line of the work, and kept there until used.

11. *Mixing*.—The thorough mixing and incorporation of all materials will be insisted upon. If done by hand labor the dry cement and sand shall be turned over and mixed with shovels by skilled workmen not less than six times before water is added; the stone after being drenched with water shall be added to the mixed sand and cement; the drenching shall not be done while the stone or gravel is in the wheelbarrow; the whole mass shall be thoroughly turned over, with shovels, not less than four times, and mixed upon a water-tight platform until every particle of stone is completely enveloped in mortar. The whole operation of mixing and laying each batch shall be performed as expeditiously as possible, by the aid of machinery or a sufficient number of skilled men. If the concrete is mixed in batches requiring one barrel of cement, the platform must not be smaller than 10 by 12 feet, nor will a larger amount of concrete than can be made with one barrel of cement be allowed to be mixed in one batch by hand. In mixing by machinery the materials must be so delivered as to insure a uniform product of the specified proportions of all ingredients to the satisfaction of the engineer commissioner.

12. *Setting*.—Concrete shall not be used after it has begun to show evidence of setting. No concrete which has once set shall be used as material for mixing a new batch.

Each batch of concrete after being mixed shall be spread in place in horizontal layers so as to give the requisite thickness after being tamped, and shall then be thoroughly compacted. Any evidence of lack of compaction will be regarded as sufficient reason for removal and replacement of the base. The base must be watered each twenty-four hours, either by rain or artificially, until covered with binder or 7 days old. Hauling over base less than 3 days old must not be allowed unless planks are laid.

13. *Binder*.—The binder course shall be composed of clean, broken stone, equal in quality to the stone for the base, and passing an inch and a quarter screen. Eighty-five per cent of this shall pass said screen in its longest dimensions, and of the remaining 15 per cent no piece shall have a larger dimension than $1\frac{1}{2}$ inches, and the stone after passing the heating drums shall not contain less than 5 nor more than 15 per cent of material passing a No. 10 screen.

The stone will be heated not higher than 350° F., in suitable appliances. It is then to be thoroughly mixed by machinery with asphalt cement, such as is acceptable for surface cement, penetration 60 to 90, at such temperature and in such proportions that the resulting binder will have life and gloss without an excess of cement. Should it appear dull from overheating or lack of cement, it will be rejected. While hot it will be hauled upon the work, spread upon the base so that when compacted it will

be at least 1½ inches in thickness, and immediately rammed and rolled until it is cold. Should the resulting course not show a proper bond, it shall be immediately removed and replaced by the contractor. Binder and top shall not be taken from the yard to the site of work when weather conditions are, in the judgment of the engineer, unsuitable for the work of laying the pavement.

The contractor shall not enter upon a concrete base in order to lay the binder course until it has obtained sufficient strength for such purpose, and during the period between laying the base and binder he shall properly protect it, and, when ordered by the engineer commissioner, shall sprinkle it in warm weather between the hours of sunset and sunrise as often as may be deemed necessary, and in cold weather cover it with a material suitable for its protection.

14. *Asphalt wearing surface.*—The wearing surface of the pavement shall be composed of asphalt cement; clean, sharp-grained sand; fine absorbent mineral dust.

15. *Asphalt cement.*—The asphaltic cement must be practically free from water, and must be within the range of forty and seventy penetration when tested at 77° F. The amount of penetration to be fixed by the engineer commissioner.

Preference will be given to an asphaltic cement that is not readily affected by the action of water, provided it is satisfactory in other respects. If an asphaltic cement is accepted that is affected by water, some provision satisfactory to the engineer commissioner must be made to guard against the results of such action, and such work must be included in the price bid.

If an asphalt has been proposed for use by the contractor and approved by the engineer commissioner, no change in the asphalt to be used shall be made unless with the approval of the engineer commissioner. If an asphalt is submitted for use which has not been successfully used for a period of at least two years for paving under conditions similar to those existing in the District of Columbia, its use may be limited to such extent as may be deemed advisable, or it may be rejected for use entirely in the discretion of the engineer commissioner.

The bitumen of the asphaltic cement must comply with the following tests:

(1) It must be of such a character that if when tested at 32° F. it shows a hardness of ten penetration, it must not when tested at 115° F. be softer than three hundred and fifty penetration.

(2) When a briquet of the pure bitumen, having a minimum cross section of 1 square centimeter, is tested for ductility at 77°, the bitumen must stretch to a distance of 8 centimeters before breaking.

(3) When the bitumen is heated in an open tin at a temperature of 300° F. for eighteen hours in a hot-air oven it must not show a loss by volatilization of over 5 per cent and it must not have been hardened over 50 per cent by this heating.

The asphaltic cement must never be heated to a temperature that will injure it.

When the asphaltic cement contains over 5 per cent of material that will separate by subsidence while in a molten condition it must be thoroughly agitated before drawing from storage and while in use in the supply kettles so as to insure a uniform cement.

These properties shall be determined by tests made by uniform methods, descriptions of which are on file in the office of the engineer commissioner.

16. *Sand.*—The sand in use shall be hard grained and moderately sharp. On sifting it should have at least 15 per cent of material that would be caught on a 40-mesh per inch screen, 25 per cent of material that will pass an 80 mesh to the inch screen, 10 per cent of which at least must pass a 100 mesh to the inch screen. If the sand to be used does not contain the desired fine material, mineral dust can be added to make up the deficiency, and in any case at least 5 per cent of such mineral dust shall be used. The amount of fine material may be diminished on streets of light traffic when approved by the engineer commissioner.

17. *Mineral dust.*—This shall be any fine, hydraulic cement or limestone dust, the whole of which shall pass a 30-mesh screen, and at least 75 per cent pass a 100-mesh screen.

18. *Asphalt paving mixture.*—The materials complying with the above specifications shall be mixed in proportion by weight, depending upon their character, and the traffic on the street, and upon the character of the asphalt, and will be determined by the engineer commissioner, but the percentage of bitumen in any mixture soluble in carbon bisulphide shall not exceed the limits 9 to 13 per cent. If the proportions of the mixture are varied in any manner from those specified, the mixture will be condemned, its use will not be permitted, and, if already placed on the streets, it will be removed and replaced by proper materials at the expense of the contractor.

The sand or the mixture of sand and mineral dust and the asphaltic cement will be heated separately to about 300° F. The dust, if limestone, will be mixed while

cold with the hot sand in the required proportions and then mixed with the asphaltic cement at the required temperature and in the proper proportion in a suitable apparatus, so as to effect a thoroughly homogeneous mixture. Sand boxes and asphalt gauges will be weighed in the presence of inspectors as often as may be desired.

Samples of all material entering into the composition of the pavement shall be supplied to the inspector of asphalt and cements when required, in suitable tin boxes and cans, and he shall have access to all branches of the works at any time.

The pavement mixture prepared in a manner thus indicated will be brought to the ground in carts at a temperature of not less than 250° or more than 350° F.; and if the temperature of the air is less than 60° F., the contractor must provide canvas covers for use in transit. It will then be thoroughly spread to a thickness of at least 2½ inches by means of hot iron rakes in such manner as to give uniform and regular grade, so that after having received its ultimate compression it will have a net thickness of at least 1½ inches. This depth will be constantly tested by means of gauges furnished by the engineer commissioner. The surface will then be compressed by hand rollers, after which a small amount of hydraulic cement will be swept over it, and it will then be thoroughly compressed by a steam roller weighing not less than 175 pounds to the inch, the rolling being continued for not less than five hours for every 1,000 yards of surface.

19. *Asphalt base.*—In resurfacing work where the depth of binder would be excessive an asphaltic or coal-tar base, as directed, will be first laid. It will be composed of clean, broken stone, free from spalls, that will pass through a 3-inch ring, well rammed, and rolled with a steam roller weighing not less than 5 tons. The rolling will be continued until the stone ceases to creep before the roller and until it is evident that the final compression has been reached. It will then be thoroughly coated with asphaltic paving cement or coal tar of approved quality, as directed.

20. *Hauling and grading.*—(a) The old material from the streets will be hauled to the nearest property yard or to such other point as the engineer commissioner may direct.

(b) Lines and grades will be established by the engineer commissioner, and no work will be commenced until these are given.

(c) Contractors are to be responsible for the proper preservation of all stakes, etc., set by the engineer for the determination of line or grade; should any such be disturbed through carelessness, the cost of replacing same will be charged against the contractor at a fixed price of \$2 for each point, to be deducted from any money due at final settlement.

(d) All material excavated, of whatsoever nature, is the property of the District and will be disposed of as the engineer commissioner shall direct.

(e) The filling will be done in layers not exceeding 12 inches in thickness, and all material used for this purpose will be subject to approval. If improper or unsuitable material be used, it will be removed at the cost of the contractor.

(f) All measurements will be made in place and payments made thereon.

(g) Should the grading involve work in both "cut" and "fill," the measurement of it will be computed on the basis of the volume of the material in place in the "cut" only; the excavated earth from the "cut" section, deposited in the "fill," will not be again paid for as "fill." Should the amount of cut on the street not suffice to make the necessary fill, the amount borrowed from other designated localities will be paid for as grading.

21. *Laying vitrified block.*—Vitrified-block gutters will ordinarily be about 28 inches wide, laid on a concrete base 6 inches in depth, of the same material and proportions and laid in the same manner as prescribed in these specifications for the concrete base under asphalt pavements.

As soon as practicable after the concrete base has been laid, a dry mixture, composed of 4 parts of the sand specified in paragraph 6 and 1 part of Portland cement, thoroughly mixed, will be spread thereon, as a bed for the paving blocks, to the depth of not less than one-half inch, and regulated so as to be exactly parallel to the finished grade of the gutter. On the bed prepared for them, the blocks will be set on edge, with the longest dimensions at right angles to the curb, as directed by the engineer.

The longitudinal joints of each course of blocks laid must be broken by a lap of not less than 4 inches.

The blocks will then be carefully rammed by placing a plank over several courses and ramming the plank with a heavy hammer. The ramming will be continued until the blocks reach a firm, unyielding bed and present a uniform surface, with proper grade. Any lack of uniformity in the surface or defect in the grade must be corrected by taking up and relaying the blocks.

After proper ramming the entire gutter will be thoroughly grouted with a thin, easily flowing grout, of neat natural cement.

A similar construction of block to that described for the gutters may be used adjacent to railroad tracks; the base will in that case extend to the bottom of the cross-ties, or be at least 6 inches thick.

The blocks will be furnished the contractor at the District property yards, and must be hauled to the work at his expense.

ADDITIONAL WORK.

22. The following specifications will cover incidental work which may be required of the contractor:

23. *Setting 6 by 20 inch granite and bluestone curb.*—This curb will be set in the following manner: A trench parallel to the curb line having a depth of 24 inches below the top of the curb, when set, and 20 inches wide, will be excavated to receive the curb and its gravel bed; the dimensions of the trench, in width, will be 14 inches from the curb line toward the building line of the street, and 6 inches from said curb line toward the center line of the street. In this trench thus prepared the curb will be set, and brought to line and grade, with plumb face. Spalls, of stone, hard-burned brick, or other acceptable substance, prepared for the purpose, will be used to adjust the stone to grade, and these spalls will be so placed and adjusted as to support the curbing permanently, and afford a firm and stable support for it, without the use of small chips and fragments, used as "shimming" pieces, to wedge the stone in place. After the stone has been properly placed, and adjusted to line and grade, the trench will be filled with gravel of approved quality to within 8 inches of the top of the curb; the filling to be done in layers of not more than 3 inches in depth, and thoroughly compacted by suitable ramming. Close contact joints and even surfaces must be made, and the lines and grades furnished strictly followed.

24. *Setting 8 by 8 inch granite curb.*—The curb will be set in the following manner: A trench parallel to the curb line, having a depth of 15 inches below the top of the curb when set, and 18 inches wide, will be excavated to receive the concrete and the curb. The dimensions of the trench in width will be 14 inches from the curb line toward the building and 4 inches from the curb line toward the center line of the street. In this trench thus prepared a bed of concrete will be laid, filling the trench to a depth of 5 inches, composed of 1 part of Portland cement, 4 parts of clean concrete sand, and 10 parts of screened pebbles, the material to be mixed and laid under the same conditions as prescribed for laying cement concrete base for sheet asphalt pavements. On the base prepared and laid as above the curb will be placed before the concrete has set, and adjusted to line and grade by setting it to a firm, unyielding bearing in a bed of freshly made concrete, by the use of heavy wooden mauls. The face of the curb must be plumb and true to line, and the top of it carefully set to grade with close and even contact joints. After the stone has been set to line and grade, the trench on the footwalk side will be immediately filled with concrete to within 5 inches of the top of the curb, which will be thoroughly rammed and compacted, after which it will immediately be covered with earth to prevent injury to it through too rapid evaporation, etc. In case vitrified block gutters are to be laid in front of the curb, any portion of the concrete base of the curb that would interfere with the laying of such gutters must be removed immediately after the curb has been set.

25. *Resetting 6 by 20 inch granite and bluestone curb.*—The work to be done under this classification is identical with that specified for setting curb, except no hauling of the curb is required other than that incidental to the necessary disposition of it upon the line of the work. Under this classification, also, the curb may be adjusted to line and grade without removing it from its trench, if so ordered by the engineer.

26. *Resetting 8 by 8 inch granite curb.*—The work to be done under this classification is identical with that specified for setting this line of curb, except that no hauling of the curb is required other than that incidental to the disposition of it in the work, and no new concrete is required other than that sufficient to embed the stone and back it, and adjust it to the line and grade.

27. *General instructions.*—All curb will be furnished to the contractor at the District property yard, and will be hauled by him to the site of the work; any curbing unaccounted for, or improperly disposed of, or damaged, or broken, through careless or unskilled handling, will be charged against him and the value of the loss to the District will be deducted from any amount due the contractor for work done, as determined by the engineer.

All expenses connected with or incidental to the work of setting or resetting curb, as described above, including the hauling of the curbing, preparing the curb trenches, and the necessary grading connected therewith, furnishing gravel and spalls, furnishing and placing concrete and all other material and labor necessary to execute the

work in accordance with the specifications therefor, are included in the fixed price for the respective items as hereinafter stated; the cost of dressing, jointing, or cutting the curb will be paid for additionally, but no other claim for additional compensation will be entertained.

Should the adjoining brick foot walks be disturbed in order to set or reset the curb, the portion so disturbed shall be repaved, if required by the engineer, without cost to the District.

28. *Additional work.*—Contractors must do such additional work incident to the construction of new pavements as may be ordered on each street by the engineer commissioner. All such work shall be in accordance with current District specifications. Prices paid for this work will be as stated below:

- (1) Removing old curb, including haul to property yard, 8 cents per linear foot.
 - (2) Hauling same beyond distance to nearest property yard, 1 cent per linear foot per mile.
 - (3) Removing old rubble, cobble, flagging, stone and brick, asphalt block, etc., including haul to the property yard, 15 cents per square yard.
 - (4) Removing old granite block, including haul to the property yard, and removal of old paving bed and cleaning concrete base where same exists, 25 cents per square yard.
 - (5) Hauling same beyond distance to nearest property yard, 1 cent per square yard per quarter mile or fraction thereof.
 - (6) Grading or hauling earth, not to exceed 1,000 feet, 45 cents per cubic yard.
 - (7) Grading and hauling macadam, not to exceed 1,000 feet, 55 cents per cubic yard.
 - (8) Removing old coal-tar and bituminous pavement or base and hauling, not to exceed 1,000 feet, 85 cents per cubic yard.
 - (9) Removing old concrete base and hauling, not to exceed 1,000 feet, \$1.50 per cubic yard.
 - (10) Hauling excavated material, per 100 feet, over first 1,000 feet, three-quarters of a cent per cubic yard.
 - (11) Hauling from District property yard and setting bluestone and 6 by 20 inch curb, 20 cents per linear foot.
 - (12) Hauling from District property yard and setting 8 by 8 inch curb, 35 cents per linear foot.
 - (13) Resetting 6 by 20 inch bluestone curb, 20 cents per linear foot.
 - (14) Resetting 8 by 8 inch curb on old concrete base, 15 cents per linear foot.
 - (15) Relaying vitrified brick or block on old concrete base, 60 cents per square yard.
 - (16) Laying asphaltic or bituminous broken stone base in place, \$3 per cubic yard.
 - (17) Laying and relaying asphalt and vitrified blocks on gravel base, 40 cents per square yard.
 - (18) Adjusting manhole tops and basin covers to grade, \$2 each.
 - (19) Laying and relaying granite blocks, 75 cents per square yard.
 - (20) Portland cement concrete base as specified herein, \$6 per cubic yard.
 - (21) Relaying cobble and rubble, 30 cents per square yard.
 - (22) Dressing, joining, and cutting curb, etc. (stonecutters' time), including setting-up labor, 65 cents per hour.
 - (23) Repairing cement walks, \$1.70 per square yard.
 - (24) Repairing brick sidewalks, 25 cents per square yard.
 - (25) Adjusting electric light manholes to grade, as follows:
 - (a) Size, 14 by 14 inches, 75 cents each.
 - (b) Size, 18 by 15 inches, \$1 each.
 - (c) Size, 36 by 26 inches, \$1.50 each.
 - (d) Size, 6 by 6 feet, \$4 each.
 - (26) Resetting 8 by 8 inch curb on new concrete base, 31 cents per linear foot.
 - (27) Laying asphalt surface, 44 cents per cubic foot.
 - (28) Laying standard asphalt surface, 2½ inches thick before compression, 60 cents per square yard.
 - (29) Laying asphalt binder, 25 cents per cubic foot.
 - (30) Cleaning old vitrified blocks for relaying, 40 cents per square yard.
29. *Bond.*—Good and sufficient bond in the penal sum equal to 25 per cent of the estimated amount of the contract, with sureties or a surety company satisfactory to the commissioners, will be required from all contractors, guaranteeing that their contract will be faithfully performed; that the contractor or contractors will be responsible for all claims for damages to persons, property, or premises arising out of his or their operations prior to the acceptance of the finished work, and that he or they will promptly make payments to all persons supplying him or them with labor or materials in the prosecution of the work provided for in the contract.

30. *Guaranty.*—All work under this contract will be guaranteed and kept in repair by the contractor without cost to the District for a period of five years from date of its acceptance by the commissioners. This date shall be the same as that of the final voucher. Ten per cent of the cost of this work will be retained and disposed of as otherwise provided for herein.

It is further expressly understood and agreed that if any of the pavements laid should, for any reason whatsoever, within the period of five years, prove inferior to the best laid in the District prior to July 1, 1904, then the contractor shall, on demand of the commissioners, remove such defective pavements and relay them with new material of approved quality, and in accordance with these specifications. The engineer commissioner shall decide the question of inferiority.

On expiration of guaranty for maintenance, the work is to be inspected, and all imperfections, depressions and unevenness of surface, alignment and grade of curbs, sidewalks, etc., must be corrected where and to such extent as the engineer commissioner shall direct, upon which the engineer commissioner will accept the same in writing, and until such acceptance the guaranty shall be in force. Repairs that may become necessary during the guaranty period will be made by the contractor when ordered by the engineer.

31. *Retain fund.*—The retain fund shall be subject to the control of the Commissioners of the District of Columbia for the purpose of maintaining the work in repair and making good any defects discovered during the period specified. In the event of the contractor failing to make such necessary repairs after notice to do so the commissioners may cause such work to be done and deduct the cost of the same from the retain fund, and, in their discretion, may require of the contractor and his sureties that any portion of the said retain fund which may have been expended for the maintenance of the work shall be made good by further deposit.

32. *Site of work.*—The bidder is expected to examine the site of work before bidding, as no allowance will be made for any unusual difficulties which may arise, either affecting the original construction or maintenance of the finished work.

33. Certificates of indebtedness against street railway companies will be given to the contractor for all work done and all materials furnished by him for the space which must be paved and kept in repair at the expense of said companies in accordance with existing laws.

34. Contractors shall be responsible for any work done upon any street over plumbers' cuts or other work done by permission of the commissioners before the work is begun.

35. The commissioners reserve the right to modify these specifications as may from time to time seem desirable. The amount of compensation, if any, due the contractor for said modifications will be determined by the engineer commissioner on the same basis as in the case of extra work.

SPECIFICATIONS FOR PAVING STREETS AND AVENUES WITH ASPHALT BLOCK.

1. *Work.*—The work to be done under this contract will consist of paving with asphalt block such streets, avenues, and roads, or parts thereof or doing such portion of such work, as may be directed under appropriations for the fiscal year ending June 30, 1909. The estimated amount is 17,000 square yards.

2. *Bids.*—The contractor will, for the prices bid, do all the work prescribed in these specifications, do all the necessary grading and trimming of the road bed and all rolling; provide bridges, fences, and other means of maintaining travel on intersecting streets, roads, and railroads, and all private driveways after giving due notice to the parties affected thereby; maintain the same in good and safe condition as long as may be necessary, and then remove such temporary expedients and restore such roads to their proper condition; provide watchmen, red lights, fences, and other precautionary measures necessary to the protection of persons and property; furnish all materials (except as specified) and all tools and implements, labor, and transportation required to lay and put in complete order for use the specified pavement, and do each and all of these to the satisfaction of the engineer. Upon the completion of the work, he will remove any temporary structures erected during the progress of the work, and restore all fixtures, pavements, and parkings, both public and private, to satisfactory condition.

3. *Asphaltic blocks.*—(a) The size of the blocks will be 5 by 4 by 12 inches, and a variation of one-fourth of an inch from these dimensions will be sufficient ground for rejecting any block.

(b) All bids must be accompanied by a specimen block of the size and quality described in these specifications, labeled with the name of the bidder and the locality

of the factory. Bids not accompanied by specimen blocks will not be accepted. The blocks will be tested for specific gravity; all blocks furnished must be equal in quality to the sample, as determined by the engineer commissioner.

(c) The blocks will be composed of asphaltic cement, mineral dust, crushed stone.

4. *Asphaltic cement.*—The asphaltic cement must be practically free from water and shall not at any time reach a temperature high enough to injure it.

If an asphalt is accepted that is readily affected by water some provision satisfactory to the engineer commissioner must be made to guard against the results of such action, and such work must be included in the price bid.

The asphaltic cement must comply with the following requirements and must in any case be subject to the approval of the engineer commissioner:

(1) For the purpose of testing the asphaltic cement its composition shall be so regulated by the addition, if necessary, of standard fine absorbent mineral dust, that it will contain 50 per cent of bitumen soluble in carbon bisulphide. This cement must be so tough at 32° F., that prism 1 centimeter square by 8 centimeters long between supports will not break under impact at center with less than 15 centimeters drop of 25 gram weight.

(2) This cement must not be softer than sixty penetration when tested at 115° F.

(3) When this cement is heated in an open tin at a temperature of 300° F., for eighteen hours in a hot-air oven it must not show a loss by volatilization of over 3 per cent, and it must not be hardened over 50 per cent by this heating.

The asphaltic cement must be thoroughly agitated before drawing from storage and while in use in the supply kettles so as to insure a uniform cement.

These tests shall be made by uniform methods, descriptions of which are on file in the office of the engineer commissioner.

5. *Mineral dust.*—This shall be any fine, absorbent, inorganic dust not acted on by water, the whole of which shall pass a 30-mesh screen, and at least 75 per cent pass a 100-mesh screen.

6. *Crushed stone.*—The crushed stone in use shall be from any tough, hard rock, and shall not contain any appreciable amount of soft ingredients, such as mica, soft sandstone, or shale. On sifting not more than 3 per cent shall be retained on a 3-mesh per inch screen, at least 40 per cent must be retained on 20-mesh per inch screen and at least 12 per cent must pass a 100-mesh per inch screen. If the stone does not contain the desired fine material, mineral dust can be added to make up the deficiency and in any case at least 5 per cent of such mineral dust shall be used.

7. *Asphaltic-block mixture.*—The materials complying with the above specifications shall be mixed in proportions by weight, depending upon their character, which will be determined by the engineer commissioner, but in any mixture the percentage of bitumen soluble in carbon bisulphide shall not exceed the limits, 6 to 9 per cent.

If the proportions of the mixture are varied in any manner from those prescribed, the blocks will not be accepted.

The stone and dust and the asphaltic cement must be mixed while hot, and the mixture must be compressed into blocks by methods meeting with the approval of the engineer commissioner.

Samples of all material entering into the composition of the pavement shall be supplied to the inspector of asphalt and cements when required, in suitable tin boxes and cans, and he shall have access to all branches of the works at all times.

Blocks for 4-inch pavement are to be manufactured with a total minimum compression of not less than 360,000 pounds per block, press pressure. Those for 5-inch pavement are to be manufactured with a total minimum compression of not less than 240,000 pounds per block, press pressure.

8. *Grading and subgrade.*—The space over which the pavement is to be laid having been excavated to the proper depth below the surface of the pavement when completed, any objectionable or unsuitable matter below the bed will be wholly removed, and the space filled with good gravel or other acceptable material, compactly rolled or rammed. The bed will then be trimmed so as to be parallel to the surface of the pavement when completed and the entire roadbed will then be thoroughly compacted by rolling a roller weighing at least 10 tons, or by thorough ramming at places which can not be reached by the roller. No extra allowance will be made for trimming and rolling, but the volume of earth, etc., removed will be paid for as grading of its class.

ASPHALT-BLOCK PAVEMENT ON GRAVEL BASE.

9. *Gravel base.*—Upon this bed, as above, is to be laid a base of good bank gravel, or other approved material, to be screened from all pebbles measuring more than 1½ inches in their largest dimensions, so as to be 5 inches thick when thoroughly compacted. The gravel will then be thoroughly compacted by rolling with a roller weighing at

least 10 tons, or by heavy ramming at places which can not be reached by the roller. The rolling will be continued until the gravel base cracks under the roller without compressing further. Upon this will be placed a layer of fine sharp sand, washed and dried, 2 inches in thickness, to serve as a bed for the blocks, which will be laid directly upon and embedded in it with close joints. Special care will be observed to make the surface of this bed of sand exactly parallel to the surface of the pavement when completed. The gravel to be used is to be equal to a sample taken from the banks in the vicinity of Fifteenth and K streets SE., and exhibited in the office of the engineer. Should the material found in the space to be occupied by the gravel bed be approved by the engineer for such use, it may be left in place and used as such bed after being satisfactorily trimmed and compacted.

Any material removed from the street in grading that is suitable may, with the approval of the engineer, be used in place of the gravel base if not needed for public use.

10. *Method of laying blocks.*—The asphalt blocks are to be laid on the bed of sand at right angles to the line of the street, and with such crown as the engineer commissioner may direct; each course to be of blocks of a uniform width and depth, and so laid that all longitudinal joints shall be broken by a lap of at least 4 inches. In laying the blocks the pavers must stand or kneel upon the blocks already laid and not upon the bed of sand. Each course of blocks will be driven against the course preceding it by a heavy maul, in order to make the lateral joints as tight as possible, and the longitudinal joints will be closed by pressing each course in the direction of its length by a lever. When thus laid the blocks will be immediately covered with clean fine sand, entirely free from any loam or earthy matter, perfectly dry, and screened through a sieve having not less than 20 meshes to the inch. This will be swept or raked into the joints and the blocks will then be carefully rammed by placing a plank or iron plate over several courses and ramming it with a heavy rammer. The ramming will be continued until the blocks reach a firm unyielding bed and present a uniform surface, with proper grade and crown. Any lack of uniformity in the surface must be corrected by taking up and relaying the blocks. When the ramming is complete, a sufficient amount of fine dry sand, as above described, will be spread over the surface.

11. *Hauling and grading.*—(a) The old material from the streets will be hauled to the nearest property yard or to such other point as the engineer commissioner may direct.

(b) Lines and grades will be established by the engineer commissioner, and no work will be commenced until these are given.

(c) Contractors are to be responsible for the proper preservation of all stakes, etc., set by the engineer for the determination of line or grade; should any such be disturbed through carelessness the cost of replacing same will be charged against the contractor at a fixed price of \$2 for each point, to be deducted from any money found due at final settlement.

(d) All material excavated, of whatsoever nature, is the property of the District, and will be disposed of as the engineer commissioner shall direct.

(e) The filling will be done in layers not exceeding 12 inches in thickness, and all material used for this purpose will be subject to approval. If improper or unsuitable material be used, it will be removed at the cost of the contractor.

(f) All measurements will be made in place, and payments made thereon.

(g) Should the grading involve work in both "cut" and "fill," the measurement of it will be computed on the basis of the volume of the material in place in the "cut" only; the excavated material from the "cut" deposited in the "fill," will not be again paid for as "fill." Should the amount of cut on the street not suffice to make the necessary fill, the amount borrowed from other designated localities will be paid for as grading.

12. *Setting and resetting curb.*—Setting 6 by 20 inch granite and bluestone curb: This curb will be set in the following manner: A trench parallel to the curb line, having a depth of 24 inches below the top of the curb when set and 20 inches wide, will be excavated to receive the curb and its gravel bed; the dimensions of the trench in width will be 14 inches from the curb line toward the building line of the street and 6 inches from said curb line toward the center line of the street. In this trench thus prepared the curb will be set and brought to line and grade with plumb face. Spalls of stone, hard-burned brick, or other acceptable substance prepared for the purpose, will be used to adjust the stone to grade, and these spalls will be so placed and adjusted as to support the curbing permanently and afford a firm and stable support for it without the use of small chips and fragments used as "shimming" pieces to line and grade the trench will be filled with gravel of approved quality to within 8 inches of the top of the curb, the filling to be done in layers of not more than 3 inches in depth and thoroughly compacted by suitable ramming. Close contact joints and even surfaces must be made and the lines and grades furnished strictly followed.

13. *Setting 8 by 8 inch granite curb.*—This curb will be set in the following manner: A trench parallel to the curb line, having a depth of 15 inches below the top of the curb when set and 18 inches wide, will be excavated to receive the concrete and the curb. The dimensions of the trench in width will be 14 inches from the curb line toward the building and 4 inches from the curb line toward the center line of the street. In the trench thus prepared a bed of concrete will be laid, filling the trench to a depth of 5 inches, composed of 1 part of Portland cement, 4 parts of clean concrete sand, and 10 parts of screened pebbles, the material to be mixed and laid under the same conditions as prescribed for laying cement concrete base under current specifications for sheet asphalt pavements. On the base prepared and laid as above, the curb will be placed before the concrete has set, and adjusted to line and grade by setting it to a firm, unyielding bearing in a bed of freshly made concrete, by the use of heavy wooden mauls. The face of the curb must be plumb and true to line and the top of it carefully set to grade with close and even contact joints. After the stone has been set to line and grade the trench on the footwalk side will be immediately filled with concrete to within 5 inches of the top of the curb, which will be thoroughly rammed and compacted, after which it will immediately be covered with earth to prevent injury to it through too rapid evaporation, etc. Any portion of the concrete base of the curb that would interfere with the laying of block must be removed immediately after the curb has been set.

14. *Resetting 6 by 20 inch granite and bluestone curb.*—The work to be done under this classification is identical with that specified for setting curb, except no hauling of the curb is required other than that incidental to the necessary disposition of it upon the line of the work. Under this classification, also, the curb may be adjusted to line and grade without removing it from its trench, if so ordered by the engineer.

15. *Resetting 8 by 8 inch granite curb.*—The work to be done under this classification is identical with that specified for setting this class of curb, except that no hauling of the curb is required other than that incidental to the disposition of it in the work, and no new concrete is required other than that sufficient to embed the stone and back it, and adjust it to the line and grade.

16. *General instructions.*—All curb will be furnished to the contractor at the District property yard, and will be hauled by him to the site of the work; any curbing unaccounted for, or improperly disposed of, or damaged, or broken, through careless or unskilled handling, will be charged against him and the value of the loss to the District will be deducted from any amount due the contractor for work done, as determined by the engineer.

All expenses connected with or incidental to the work of setting or resetting curb, as described above, including the hauling of the curbing, preparing the curb trenches, and the necessary grading connected therewith, furnishing gravel and spalls, furnishing and placing concrete and all other material and labor necessary to execute the work in accordance with the specifications therefor, are included in the fixed price for the respective items as hereinafter stated; the cost of dressing, jointing, or cutting the curb will be paid for additionally, but no other claim for additional compensation will be entertained.

Should the adjoining brick footwalks be disturbed in order to set or reset the curb, the portion so disturbed shall be repaved, if required by the engineer, without cost to the District.

17. *Additional work.*—Contractors must do such additional work incident to the construction of new pavements as may be ordered on each street by the engineer commissioner. Prices paid for this work will be as stated below:

- (1) Removing old curb, including haul to property yard, 8 cents per linear foot.
- (2) Hauling same beyond distance to nearest property yard, 1 cent per linear foot per mile.
- (3) Removing old rubble, cobble, flagging, stone and brick, asphalt block, etc., including haul to the property yard, 15 cents per square yard.
- (4) Removing old granite block, including haul to the property yard, 25 cents per square yard.
- (5) Hauling same beyond distance to nearest property yard, 1 cent per square yard per quarter mile or fraction thereof.
- (6) Grading and hauling earth, not to exceed 1,000 feet, 45 cents per cubic yard.
- (7) Grading and hauling macadam, not to exceed 1,000 feet, 55 cents per cubic yard.
- (8) Removing old coal-tar and bituminous pavement or base and hauling, not to exceed 1,000 feet, 85 cents per cubic yard.
- (9) Removing old concrete base and hauling, not to exceed 1,000 feet, \$1.50 per cubic yard.
- (10) Hauling excavated material, per 100 feet, over first 1,000 feet, three-quarters of a cent per cubic yard.

- (11) Hauling from District property yard and setting 6 by 20 inch curb, 20 cents per linear foot.
- (12) Hauling from District property yard and setting 8 by 8 inch curb, 35 cents per linear foot.
- (13) Resetting 6 by 20 inch bluestone curb, 20 cents per linear foot.
- (14) Resetting 8 by 8 inch curb on old concrete base, 15 cents per linear foot.
- (15) Relaying vitrified brick or block on old concrete base, 60 cents per square yard.
- (16) Laying asphaltic or bituminous broken stone base in place, \$3 per cubic yard.
- (17) Laying and relaying asphalt and vitrified blocks on gravel base, 40 cents per square yard.
- (18) Adjusting manhole tops and basin covers to grade, \$2 each.
- (19) Laying and relaying granite blocks, 75 cents per square yard.
- (20) Portland cement concrete base as specified herein, \$6 per cubic yard.
- (21) Relaying cobble and rubble, 30 cents per square yard.
- (22) Dressing, jointing, and cutting curb, etc. (stonecutters' time), including setting-up labor, 65 cents per hour.
- (23) Repairing cement walks, \$1.70 per square yard.
- (24) Repairing brick sidewalks, 25 cents per square yard.
- (25) Laying vitrified brick or block on 6-inch concrete base as specified, \$1.30 per square yard.
- (26) Adjusting electric-light manholes to grade, as follows:
 - (a) Size, 14 by 14 inches, 75 cents each.
 - (b) Size, 18 by 15 inches, \$1 each.
 - (c) Size, 36 by 26 inches, \$1.50 each.
 - (d) Size, 6 by 6 feet, \$4 each.
- (27) Resetting 8 by 8 inch curb on new concrete base, 31 cents per linear foot.
- (28) Cleaning old vitrified blocks for relaying, 40 cents per square yard.

18. *Bond*.—Good and sufficient bond in a penal sum equal to 25 per cent of the estimated amount of the contract, with sureties or a surety company satisfactory to the commissioners, will be required from all contractors, guaranteeing that their contract will be faithfully performed; that the contractor or contractors will be responsible for all claims for damages to persons, property, or premises arising out of his or their operations prior to the acceptance of the finished work, and that he or they will promptly make payments to all persons supplying him or them with labor or materials in the prosecution of the work provided for in the contract.

19. *Guaranty*.—All work under this contract will be guaranteed and kept in repair by the contractor without cost to the District for a period of five years from date of its acceptance by the commissioners. This date shall be the same as that of the final voucher. Ten per cent of the cost of this work will be retained and disposed of as provided for by law.

It is further expressly understood and agreed that if any of the pavements laid should for any reason whatsoever, within the period of five years, prove inferior to the best laid in the District prior to July 1, 1904, then the contractor shall, on demand of the commissioners, remove such defective pavements and replace them with new material of approved quality. The engineer commissioner shall decide the question of inferiority.

On expiration of guaranty for maintenance, the work is to be inspected, and all imperfections must be corrected where and to such extent as the engineer shall direct, upon which the engineer will accept the same in writing, and until such acceptance the guaranty shall be in force. Repairs that may become necessary during the guaranty period will be made by the contractor when ordered by the engineer.

20. *Retain fund*.—The retain fund shall be subject to the control of the Commissioners of the District of Columbia for the purpose of maintaining the work in repair and making good any defects discovered during the period specified. In the event of the contractor failing to make such necessary repairs after notice to do so, the commissioners may cause such work to be done and deduct the cost of the same from the retain fund, and, in their discretion, may require of the contractor and his sureties that any portion of the said retain fund which may have been expended for the maintenance of the work shall be made good by further deposit.

21. *Site of work*.—The bidder is expected to examine the site of work before bidding, as no allowance will be made for any unusual difficulties which may arise, either affecting the original construction or maintenance of the finished work.

22. *Cuts*.—Contractors shall be responsible for any work done upon any street over plumbers' cuts or other work done by the permission of the commissioners before the work is begun.

23. Certificates of indebtedness against street-railway companies will be given to the contractor for all work done and all materials furnished by him for the space which

must be paved and kept in repair at the expense of said companies in accordance with existing laws.

24. The commissioners reserve the right to modify these specifications as may from time to time seem desirable. The amount of compensation, if any, due the contractor for said modifications will be determined by the engineer commissioner on the same basis as in the case of extra work.

SPECIFICATIONS FOR LAYING CEMENT SIDEWALKS.

1. *Classes "A" and "B."*—Work under class "A" will consist of all large work located on streets, avenues, places, etc., within the limits of the city of Washington (including Georgetown or West Washington), and all work on streets, avenues, places, etc., beyond said limits where the roadways are paved. Work under class "B" will consist of all large work located on streets, avenues, places, etc., outside the limits of the city of Washington, as above, where the roadways are not paved, and of all small work wherever located. For classification for purposes of payment under this contract any item of work which exceeds 100 square yards will be rated and paid for as "large work," items of 100 square yards or less being rated as "small work." The aggregate of the item will be the determining consideration, since it may consist of two or more detached pieces in same vicinity. Any question as to classification under this paragraph will be decided by the engineer commissioner.

2. *Grading.*—The contractor is to make such cutting and filling as may be necessary to bring the foundation, when compacted, to the level of 5 inches below the surface of the finished pavement. Grading, either cut or fill, to the needed depth, not exceeding 1 foot on the average for each separate piece of work, and including the area of tree spaces, either continuous or interrupted, must be done without additional or extra charge, inclusive of removal and haul to designated property yard of all sidewalk material between the curb line and the back of the new work, except that of cement or asphalt, whether the old sidewalk is wholly replaced by the new cement part or not.

Grading in excess of the 1 foot average depth and removal of old cement or asphalt sidewalk will be paid for as additional work at prices stated herein.

Material for filling must be suitable for the purpose, and satisfactory to the engineer, and must be placed in layers and compacted for making good foundation, as required by him.

In case of excavation, any unsuitable or objectionable material in the bed, as determined by the engineer, is to be wholly removed and the spaces filled with broken stone or other suitable material satisfactory to him.

The contractor is to trim the bed so as to make it parallel to the surface of the finished pavement and thoroughly compact the bed by rolling or ramming without extra pay.

On the bed thus prepared will be laid, after compacting, 4 inches of cement concrete and 1 inch of cement mortar, covered by a thin, dry surface coat, all made of the materials and in the manner hereafter described.

3. *Cement.*—The cement used will be a standard brand of Portland cement, uninjured by age or exposure, and delivered at the work in original undamaged packages. The cement shall conform to the current specifications for supplying Portland cement to the engineer department of the District of Columbia. The contractor shall keep the cement in store, under proper cover, in the city of Washington, and shall properly protect it until used. The engineer shall have the right to test the cement as he judges necessary and to reject any or all lots.

4. *Sand.*—The sand used shall be clean and sharp, from fine to coarse, free from sewerage, mud, clay, mica, paper, leaves, chips, and other foreign matter, but may show when shaken with water and after subsidence not more than 3 per cent by volume of silt or loam. Sand used for surface layer must be screened on line of work; screen to be used for this purpose to be designated by the engineer. Sand stored at the work shall, when required, be dumped on boards or other suitable platform and kept as clean as when delivered.

5. *Gravel.*—The gravel shall be from small to medium size and as good in quality as the best Potomac River washed gravel. The gravel shall be free from dust, dirt, chips, leaves, and other foreign or objectionable matter, and when required shall be dumped on boards and cared for as provided for sand in the preceding paragraph.

6. *Mortar and concrete.*—The mortar shall be composed of the cement and sand in the proportion of one to two, by volume, thoroughly mixed dry; a sufficient quantity of water will be added afterwards by fine sprinkling to form, upon remixing, a stiff, plastic paste. The proportions are intended to secure a mortar in which every particle of sand is enveloped by cement and all voids in the gravel filled with mortar, and this result must be obtained to the satisfaction of the engineer. If the mixing be by hand, it shall

be done on a water-tight platform with tight raised edges, and the cement spread first. No batch shall contain more than one barrel of cement.

The mixing shall be done by the use of shovels, hoes, and rakes until a thoroughly uniform mortar or proper consistency as above described is secured.

7. *Concrete*.—To the mortar, made as above directed, shall be added 5 parts by volume of the specified gravel, which shall have been thoroughly drenched with water just before it is added to the mortar. The drenching shall not be done in the barrow, nor otherwise to permit the addition of free water to the mortar. Each batch of concrete shall be thoroughly mixed until each piece of gravel is wholly coated with mortar and in a manner satisfactory to the engineer. If the mixing be by hand, it shall be done on a water-tight platform with tight raised edges, and in the mixing the gravel shall be first spread over the mortar. The concrete immediately after mixing will be spread upon the foundation, so that the mortar shall remain evenly incorporated with gravel, and then thoroughly compacted by ramming. The slab or flag divisions are then to be marked off to the size, and markings cut 3 inches deep. The space made by the cutting tool shall be immediately filled with dry sand and well rammed. Should the contractor so desire he will be permitted to substitute broken stone for the gravel used in concrete. Such stone should be hard, durable, and properly broken to a size small enough to pass through a ring 2 inches in diameter and may be the run of the crusher, containing not over 1 per cent of material passing a No. 70 sieve. It shall be free from foreign substances as provided for gravel.

8. *Mortar and surface*.—Mortar for the surface layer shall be made of the specified cement and sand, mixed in the manner as for mortar for concrete, but in the proportion of two to three, by volume. The mortar shall be spread while fresh upon the concrete base while the latter is still soft and adhesive and before it shall have reached its first set, in such quantity that after thorough manipulation it shall be 1 inch in thickness. It is then to be leveled off and beaten with wooden battens, so as to break any air cells and make the surfacing perfectly solid and at the true grade. No pavement marked by sand which has been spread over it for protection will be accepted.

9. *Dry coat*.—A coating of dry cement and fine sand in equal proportions, by volume, and such part and kind of coloring matter as the engineer may direct, thoroughly mixed, is then to be floated into the layer; and by a skillful use of tools the surface is to be made smooth and ready for the markings of the slabs; the markings will be made to a depth of one-half inch and immediately over those made in the concrete. The slabs are then to be brought to true lines and grades, and, except at about inch margins, rolled with a toothed roller to make a surface that will not be slippery.

Any lack of compaction between the concrete and mortar layers shall be sufficient reason for requiring entire removal and the substitution of new and satisfactory work.

10. *Protection of work*.—The pavement is to be kept moist, protected against the weather and guarded against foot travel, until it has set. Care shall be taken at all times not to interfere with business or travel more than is absolutely necessary for faithful execution of the work. Free ingress and egress from the street to entrances to premises fronting on the sidewalk shall be provided for at all times; and during the time that travel is closed the contractor shall provide a temporary walk and keep it in good condition, safe for pedestrians and easy of access from adjoining walks or roadways. The contractor will not be allowed to obstruct private driveways or approaches, or to dig up or occupy the streets by material more than is absolutely necessary for the prosecution of the work. Special care will be taken to inconvenience the public as little as possible. The contractor will be held responsible for all injury done to the work in any way until it has been accepted and measured by the engineer.

11. *Driveways*.—Driveways shall be laid the same as sidewalks, except that the surface shall be divided into small squares as in K street NW., near Connecticut avenue. The plan of driveways shall be as directed by the engineer.

12. *Tree spaces*.—Tree spaces will be left as directed. These spaces and also other edges of the work not abutting against curb, poles, or straight lines of parking, terrace, or coping, will be outlined by planed boards of sound pine, 5 inches deep, set on edge to true line, and with top edge even with the pavement surface.

The edges of the new pavement not joining a curb or coping are to be cleanly cut down on a true line, 1 inch below the finished surface. The edges adjacent to interrupted tree spaces are to be plaster finished. The area of the tree space, either continuous or interrupted, is to be filled with earth up to the level of the pavement.

13. *Plumbing*.—All preliminary plumbing work will be done by the District. The contractor will be held responsible for all plumbing appurtenances within the limits of the finished sidewalk being at its grade and for any damage or obstruction thereto due to his operation.

14. *Cleaning work*.—Before acceptance of the work it will be cleaned and all débris and unused material removed. No crumbling or uneven edges of the sidewalk will

be allowed to remain. Pine strips at edges of concrete will not be removed before forty-eight hours after the pavement is laid.

15. *Inspection of work.*—The engineer will appoint an inspector to see that each piece of work, including curb work, is graded and laid according to specifications and directions. The District will not pay for any work done during the absence of the inspector.

16. *Additional work.*—Contractors must do such additional work incident to the construction of new pavements as may be ordered on each street by the engineer commissioner. All such work shall be in accordance with current District specifications. Prices paid for this work will be as stated below:

Removing old curb, including haul to property yard, 8 cents per linear foot.

Hauling same beyond distance to nearest property yard, 1 cent per linear foot per mile.

Removing old rubble, cobble, flagging, stone and brick, asphalt block, etc., including haul to the property yard, 15 cents per square yard.

Removing old granite block, including haul to property yard, 25 cents per square yard.

Hauling same beyond distance to nearest property yard, 1 cent per square yard per quarter mile or fraction thereof.

Grading or hauling earth, not to exceed 1,000 feet, 45 cents per cubic yard.

Grading and hauling macadam, not to exceed 1,000 feet, 55 cents per cubic yard.

Removing old coal-tar and bituminous base and hauling, not to exceed 1,000 feet, 85 cents per cubic yard.

Removing old asphalt and cement sidewalk pavement and hauling, not to exceed 1,000 feet, 85 cents per cubic yard.

Removing old concrete base and hauling, not to exceed 1,000 feet, \$1.50 per cubic yard.

Hauling excavated material, per 100 feet, over first 1,000 feet, three-quarters of a cent per cubic yard.

Hauling from District property yard and setting bluestone and 6 by 20 inch curb, class A, 20 cents per linear foot.

Hauling from District property yard and setting bluestone and 6 by 20 inch curb, class B, 23 cents per linear foot.

Hauling from District property yard and setting 8 by 8 inch curb, class A, 32 cents per linear foot.

Hauling from District property yard and setting 8 by 8 inch curb, class B, 35 cents per linear foot.

Resetting 6 by 20 inch bluestone curb, 20 cents per linear foot.

Resetting 8 by 8 inch curb on old concrete base, 15 cents per linear foot.

Relaying vitrified brick or block on old concrete base, 60 cents per square yard.

Laying asphaltic or bituminous broken stone base in place, \$3 per cubic yard.

Laying and relaying asphalt and vitrified block on gravel base, 40 cents per square yard.

Adjusting manhole tops and basin covers to grade, \$2 each.

Laying and relaying granite block, 75 cents per square yard.

Portland-cement concrete base as specified herein, \$6 per cubic yard.

Relaying cobble and rubble, 30 cents per square yard.

Dressing, joining, and cutting curb, etc. (stonecutters' time), including setting-up labor, 65 cents per hour.

Repairing brick sidewalks, 25 cents per square yard.

Adjusting electric-light manholes to grade, as follows:

(a) Size, 14 by 14 inches, 75 cents each.

(b) Size, 18 by 15 inches, \$1 each.

(c) Size, 36 by 26 inches, \$1.50 each.

(d) Size, 6 by 6 feet, \$4 each.

Resetting 8 by 8 inch curb on new concrete base, including removal of old concrete base, 31 cents per linear foot.

Repairing cuts, etc., in cement walks when specifically ordered in writing under this paragraph, \$1.70 per square yard.

The last item of additional work consists in all necessary repairs to cuts in cement walks made by individuals, corporations, or by employees or agents of the District of Columbia when such repairs are specifically ordered to be made in writing. Such repairs are to be made within fifteen days after receipt of such written notice, in strict conformity with the within specifications. The payment therefor will be made monthly and no retent will be held on this class of work. The last three years' experience shows an annual aggregate of about 3,500 square yards of such cuts.

The repaving of all roadway pavements necessarily disturbed in setting or resetting curb will be done by the District without cost to the contractor.

The setting and resetting of the curb shall be done according to current District of Columbia specifications for such work.

All additional or extra work not herein specified is to be paid for at current contract rates for work of a similar character, or, if the extra work should be of a class for which no rate is fixed by current contracts, at actual reasonable cost of labor and materials, plus 15 per cent.

The old curb may be removed and reset to grade and line, or the old curb may be straightened and leveled without removing it from place, as required by the engineer.

17. Existing brick walks abutting the ends of new cement walks are to be relaid, if necessary, without cost to the District, in such manner as to make them conform to the grade, etc., of the new walks in a manner satisfactory to the engineer.

18. *Amount of work.*—The work to be done under this contract consists in laying cement sidewalks in such places and in such order as may be directed by the commissioners under appropriations for the fiscal year 1909. The amount of work to be done under this contract can not be stated with any precision, but as an indication of what is anticipated the amount of the contractor's bond will be determined on the basis of 70,000 square yards. No guarantee is given that the quantity here stated will be equalled or may not be exceeded. The bids will be classified and award of contract based on 60,000 square yards of class A, and 10,000 square yards of class B.

19. Good and sufficient bond in a penal sum equal to 25 per cent of the estimated amount of the contract, with sureties or a surety company satisfactory to the commissioners, will be required from all contractors, guaranteeing that their contract will be faithfully performed; that the contractor or contractors will be responsible for all claims for damages to persons, property or premises arising out of his or their operations prior to the acceptance of the finished work, and that he or they will promptly make payments to all persons supplying him or them with labor or materials in the prosecution of the work provided for in the contract.

20. *Payment.*—Payments will be made monthly, provided the progress of the work is satisfactory, less 10 per cent of each estimate to be withheld until final payment; but 10 per cent of the cost of the work will be retained and invested as herein provided.

21. *Guarantee.*—All work under this contract will be guaranteed and kept in repair by the contractor without cost to the District for a period of 5 years from the date of its acceptance by the commissioners. This date shall be the same as that of the final voucher. Ten per cent of the cost of this work will be retained and disposed of as provided for by law.

On expiration of guarantee for maintenance, the work is to be inspected, and all imperfections must be corrected where and to such extent as the engineer shall direct, upon which the engineer will accept the same in writing, and until such acceptance the guarantee shall be in force.

22. *Retain fund.*—The retain fund shall be subject to the control of the Commissioners of the District of Columbia for the purpose of maintaining the work in repair and making good any defects discovered during the period specified. In the event of the contractor failing to make such necessary repairs after notice to do so the commissioners may cause such work to be done and deduct the cost of the same from the retain fund, and, in their discretion, may require of the contractor and his sureties that any portion of the said retain fund which may have been expended for the maintenance of the work shall be made good by further deposit.

23. *Cuts.*—Contractors shall be responsible for any work done upon any street over plumbers' cuts or other work done by the permission of the commissioners before the work is begun.

The commissioners reserve the right to modify these specifications as may from time to time seem desirable. The amount of compensation, if any, due the contractor for said modifications will be determined by the engineer commissioner on the same basis as in the case of extra work.

FORMS ACCOMPANYING ALL SPECIFICATIONS.

INSTRUCTIONS TO BIDDERS.

1. *Signature.*—Proposals must be signed by the bidder with the signature in full. When a firm is a bidder, the agent who signs the firm name to the proposal shall state, in addition, the names of the individuals composing the firm. When a corporation is a bidder, the person signing shall state under the laws of what State the corporation was chartered, and the name and title of the officer having authority under the by-laws to sign contracts. The proposal shall also bear the seal of the corporation,

attested by its secretary. Anyone signing the proposal as agent must file with it legal evidence of his authority so to do.

2. *Address.*—Post-office address, county, and State must be given after the signature.

3. *Prices.*—All prices must be written in words as well as expressed in figures. In case of variation the written prices shall govern.

4. *Identification of proposal.*—Proposals will be placed in a sealed envelope, so marked as to indicate its contents without being opened. This envelope will be placed in another addressed to the Commissioners of the District of Columbia, Washington, D. C.; if forwarded otherwise than by mail it must be delivered to the secretary of the board of commissioners.

5. *Rejection of bids.*—Reasonable grounds for supposing that any bidder is interested in more than one proposal for the same item will cause the rejection of all proposals in which he is interested. The commissioners reserve the right to waive any informality in the proposals received, to disregard the proposals of any failing bidder or contractor, and to reject any and all proposals or parts of a proposal and to make the award in such manner as they consider best for the interests of the District of Columbia.

6. *Experience.*—Bidders must present satisfactory evidence that they have been regularly engaged in the business of constructing such work as they propose to execute, and in case the lowest responsible bidder has never done any work for the District of Columbia he must, prior to the award of contract, be able to show work done by him within a distance of 1,000 miles from the District of Columbia, and (may be required to) pay the necessary expenses of an inspection of such work by such representatives of the District of Columbia, not exceeding two in number, as may be sent by the engineer to examine it.

7. *Capital and plant.*—Bidders must present satisfactory evidence that they are fully prepared with the necessary capital, materials, and machinery to conduct the work to be contracted for to the satisfaction of the commissioners, and to begin it promptly when ordered.

8. *Return of deposits.*—Bidders' deposits will be returned on application to the chief clerk, engineer department, to unsuccessful bidders after award of contract is made, and to successful bidders after execution of contract.

9. *Laws affecting public work.*—The attention of bidders is invited to the "act regulating the retent on contracts with the District of Columbia, approved March 31, 1906:

"That on all contracts made by the District of Columbia for construction work there shall be held a retent of ten per centum of the cost of such construction work as a guaranty fund to keep the work done under such contracts in repair, and that the terms of such contracts shall be strictly and faithfully performed. On contracts for the construction of asphalt, tar, brick, cement, or stone pavements the retent shall be held for a term of five years from the date of completion of the contract. On contracts for the construction of bridges and sewers the retent shall be held for a term of one year from date of completion of contract. On contracts for the construction of buildings, and other contracts for construction work, the retent shall be held until the completion of the work. All retents for one year or more shall be deposited with the Treasurer of the United States, as now required by law."

Also the following clause of the act of March 3, 1887:

"That the Treasurer of the United States, as commissioner of the sinking fund of the District of Columbia, shall not be compelled hereafter to invest money retained from District contracts hereafter entered into; but may, in his discretion retain said funds without interest, or invest the same in any class of United States or District of Columbia bonds, at the request and at the risk of the contractor, whenever the sum retained on any contract shall reach the sum of one hundred dollars or more; any sum less than one hundred dollars shall be retained without interest as above."

Also to public act No. 82, approved February, 28 1899, relative to payment of claims for material and labor furnished for District of Columbia buildings, and to the public act relating to the limitation of the hours of daily service of laborers and mechanics upon the public works of the United States and the District of Columbia.

All laws and regulations of the United States and of the District of Columbia, especially in so far as they relate to the protection of life and property, are to be strictly observed.

10. Changes, alterations, or interlineations must be explained by footnote in proposal.

11. If a bidder wishes to withdraw his proposal, he may do so before the time fixed for the opening, without prejudice to himself, by communicating his purpose in writing to the secretary to the board of commissioners, and when reached, it shall be handed to him or to his authorized agent unread.

GENERAL STIPULATIONS.

1. These stipulations are part of the specifications.
2. *Transfers.*—No contract or any interest therein shall be transferred by the parties to whom the award is made; such transfers will be null and void, and will cause the contract to be annulled and the work to be given to other parties under the conditions mentioned herein.
3. *Patents.*—When required the contractor will give bond to indemnify the District of Columbia against all claims for damages for and on account of infringement of patent rights of any kind or nature whatsoever.
4. *Contractor's risk.*—All loss or damage due to negligence, or arising out of the nature of the work to be done, or from any unforeseen or unusual obstructions or difficulties which may be encountered in the prosecution of the same, or from the action of the elements, will be sustained by the contractor.
5. *Employees.*—The contractor shall employ capable superintendents or foremen to represent him on the work, and they shall receive and obey orders from the engineer. He shall so conduct his operations as to interfere with the work of other District contractors as little as possible. Skilled laborers and mechanics only shall be employed.

An employee or agent of the contractor who shall use profane or abusive language to the inspector, or otherwise impede or embarrass him in the performance of his duty, or who, in the opinion of the engineer, is careless or incompetent, or obstructs the progress of the work, or disobeys or evades the instructions given by the engineer, shall be immediately discharged and not again employed without the consent of the engineer.

6. *Weather.*—The contractor shall suspend all work under the contract when notified by the engineer that the weather is unsuitable for carrying it on.

If work is allowed during cold or freezing weather the contractor shall take such additional precautions as the engineer shall require, without additional expense, and under no circumstances shall materials be used which have been injured by the weather.

7. *Inspection.*—Inspectors may be appointed who shall have access to all parts of the work at all times and whose duty it shall be to point out to the contractors any neglect or disregard of the specifications of contract; but the right of final rejection of the work will not be waived at any time. Upon all technical questions concerning the execution of the work, in accordance with the specifications and measurements thereof, the decision of the engineer shall be final. Ordinarily, one inspector will be employed by the District of Columbia for each section of the work under contract; but if, on account of any apparent disregard of the specifications, additional inspectors shall be required, they will be employed by the District of Columbia, at the rate not to exceed \$4.50 per diem each, and the cost of the same will be charged to the contractor.

8. *Condemned work.*—All materials furnished and work done not in accordance with these specifications shall be removed within twenty-four hours after written notice from the engineer by and at the expense of the contractor, or, in case of failure to do so, it shall be removed by the District of Columbia and the cost thereof charged to the contractor and deducted from the amount due or which may become due him. None but the best material of the several descriptions shall be used.

9. *District material.*—No materials furnished by the District shall be applied to any other use, public or private, than that for which they are issued to the contractor. The contractor will be held responsible for all materials delivered to him upon requisition and shall be charged for all materials delivered upon said requisition. Should the amount of materials delivered to the contractor exceed the amount used upon the work or otherwise properly accounted for the cost to the District of the difference must be made good by the contractor and will be deducted from any moneys which may be due him.

Any material that is the property of the District that is not accounted for by the contractor will be charged against him at the contract price for similar material.

10. *Delay.*—Delay on the part of the District to furnish materials is not to give cause for claims for damages, but the time for completing the work may be extended on this account as the engineer shall judge equitable, or if, owing to excessive wet weather, severe cold, or other cause beyond the control of the contractor, he is prevented from finishing his work in time, his contract may be extended by the commissioners without penalty or cost of inspection.

11. *Failure.*—Except as covered by paragraph 10, failure of the contractor to commence the work at the time specified or to prosecute it thereafter in a satisfactory manner and at a proper rate of progress, in the opinion of the commissioners, to insure

its completion in the time specified, will be authority for the commissioners to suspend the contractor from the work and employ other parties to complete it, or to employ additional parties to assist in its completion, or to annul the contract. Upon the death of a contractor during the life of a contract his executors, administrators, or other personal representatives will be expected, without further notice, to prosecute the work to completion, and upon failure or neglect to do so, within a reasonable period, in the opinion of the commissioners, to insure its completion within the stipulated time, the said commissioners shall proceed as specified above in the case of a failure of the contractor.

All moneys due to the contractor or his estate at the date of failure will be applied to the conduct and maintenance of the work, and any excess of cost over and above the contract price will be charged against the contractor and sureties, who will each and severally be held liable therefor.

The commissioners may, if it is their opinion that such action will be to the advantage of the District, grant the contractor an extension of time, charging him with the cost of inspection at the rate of \$4 per day for each inspector engaged upon the work, and deducting from him not to exceed \$10 for each day of such extension, either or both, the latter as liquidated and fixed damages to the District arising from the failure to complete the work in the time specified; or they may waive all charges or penalties for such extension.

12. *Extra work.*—The contractor must be prepared to do any extra work that may be ordered in writing by the engineer arising out of any modification of these specifications that may appear necessary, and for this he will be paid at current contract rates for work of similar character; or, if the extra work should be of a class for which no rate is fixed by current contracts, the actual reasonable cost to the contractor as determined by the engineer, plus 15 per cent. The contractor shall have no claim for compensation for extra work unless the same is ordered in writing by the engineer. All additional and extra work shall conform to current District of Columbia specifications therefor.

13. *Payments.*—Payments will be made monthly, provided the progress of the work is satisfactory, less 10 per cent of each estimate, to be withheld until final payment; but 10 per cent of the cost of the work will be retained and invested as hereinbefore provided.

14. *Conveniences.*—Necessary conveniences, properly secluded from public observation, shall be constructed whenever needed for the use of the laborers on the work.

15. *Cleaning up.*—On the completion of work it shall be thoroughly cleaned before it will be accepted.

16. *Lines.*—All necessary lines and levels will be given by the engineer by means of suitable marks, and in establishing them the contractor shall provide such materials and assistance as may be required by the engineer. All marks given are to be carefully preserved, and if destroyed through carelessness the cost of replacing them shall be charged against the contractor at a fixed price of \$2 for each point, to be deducted from any money found due at final settlement.

17. All loss or damage due to negligence or arising out of the nature of the work to be done, or from any unforeseen or unusual obstructions or difficulties which may be encountered in the prosecution of the same or from the action of the elements, will be sustained by the contractors.

18. *Interpretation.*—Any doubt as to the meaning of these specifications will be explained by the engineer, who shall have the right to correct any errors or omissions in them when such correction is necessary for the proper fulfillment of their intention. Whenever the word "commissioners" is used in these specifications it is understood to designate the Commissioners of the District of Columbia. Whenever the word "engineer" is used it is understood to designate the Engineer Commissioner of the District of Columbia, or, in his absence, his duly authorized assistants, assistant engineers, and inspectors representing him, limited by the special duties intrusted to them.



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